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Occasional Papers
OF THE
Boston Society of Natural History
VII.

FAUNA OF NEW ENGLAND.

8.

LIST OF THE PISCES.

By WILLIAM C. KENDALL.

BOSTON:
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Fauna of New England.

The Library and Publishing Committee will issue, as volume seven of the Occasional Papers, a Catalogue of the animals of New England.

Parts will be published at irregular intervals, and though the details of the several lists will vary somewhat in the different groups, each list will include, 1st, the accepted name (scientific and vernacular); 2d, reference to the original description, with record of locality; 3d, reference to an authentic description and illustration, and 4th, habitat and occurrence.

The Committee considers these lists a necessary preliminary to a series of comprehensive, illustrated monographs, the publication of which it is hoped the Society will at some later time take upon itself.

The Committee also believes that these lists will aid in the accumulation of valuable material for the New England collection of the Society. With this in view a separate check list of names will be issued with each part. In this check list the + indicates a specimen in the Society's Museum; the — that a trustworthy record exists.

Toward the accomplishment of its aims the Committee invites the coöperation of all interested in the Fauna of New England.

Communications concerning specimens should be addressed to the Curator of the Society (Chas. W. Johnson), notes and records of occurrence to the Editor of the "Fauna of New England" (Samuel Henshaw).

Boston Society Natural History,
234 Berkeley St., Boston, Mass.

	Me.	N.H.	Vt.	Mass.	R. I.	Conn.
Myxine glutinosa	—	—				
Petromyzon marinus	—	—	—	+	—	—
unicolor			—			
Ichthyomyzon concolor			—			
Chlamydoselachius anguineus	?					
Mustelus canis				+	—	—
Galeocerdo tigrinus				—		
Prionace glauca				—		
Carcharhinus obscurus				+	—	—
milberti				—	—	
limbatus				—		
Sphyrna zygaena				+	—	—
Alopias vulpes	—			+	—	—
Carcharias littoralis	—			+	—	
Isurus dekayi	—			—	—	—
Lamna cornubica	—			—	—	
Carcharodon carcharias	—			—		
Cetorhinus maximus	—			—		
Squalus acanthias	—			+	—	
Centroscymnus coelolepis				—		
Centrosyllium fabricii				—		
Somniosus microcephalus	—			—		
Echinorhinus spinosus				—		
Squatina squatina				—		
Raja erinacea	—			+	—	—
ocellata	—			+	—	—
radiata	—			+		+
eglanteria				—		+
senta				—		
laevis	—			+	—	—
Tetronarce occidentalis	—			+	—	—
Dasyatis centrura				+	—	—
hastata				—	—	
Pteroplatea maclura				+	—	—
Myliobatis freminvillei				+	—	—
Rhinoptera bonasus				—	—	—
Acipenser sturio	—			+	—	—
rubicundus			—			
brevirostrum				+	?	
Lepisosteus osseus			—			
Amia calva			+			
Felichthys marinus				—	+	
Galeichthys felis				+	—	

	Me.	N.H.	Vt.	Mass.	R. I.	Conn.
Ameiurus lacustris			—			
vulgaris			—			
nebulosus	+	—	—	+	—	—
Carpiodes thompsoni			+			
Catostomus catostomus	+	—	—			
commersonii	+	—	—	+	—	—
nigricans			—	—		
Erimyzon oblongus	—	—	—	+	—	—
Moxostoma aureolum			+			
Chrosomus erythrogaster	—	—				
Pimephales notatus			—			
anuli	—					
Semotilus bullaris	+	+	—	+		—
atromaculatus	—	—	—	—		—
Leuciscus carletoni	—					
Phoxinus neogaeus	—	—				
Abramis crysoleucas	—	—	—	+	—	—
Notropis bifrenatus	+			—		
muskoka	—					
blennius			—			
hudsonius			—			
cornutus	—	+	—	+	—	—
atherinoides			—			
rubrifrons			—			
Rhinichthys cataractae		—	—	—		—
atronasus	+	—	—	+	—	—
Couesius plumbeus	+	—	—			
Hybopsis kentuckiensis				—		
Exoglossum maxillingua			—			
Anguilla chrisypa	+	—	—	+	—	+
Leptocephalus conger	—			+	—	
Muraena retifera				—		
Tarpon atlanticus				—	—	
Elops saurus				—	—	
Albula vulpes				—	—	
Hiodon tergisus			—			
Etrumeus teres				+	—	
Clupea harengus	—	—		—	—	—
Clupanodon pseudohispanicus				—		
Pomolobus mediocris	—			+	—	—
pseudoharengus	+	—		+	—	+
aestivalis	—	—		—		
Alosa sapidissima	—	—	—	+	—	—

	Me.	N.H.	Vt.	Mass.	R. I.	Conn.
Opisthonema oglinum				—	—	
Brevoortia tyrannus	+	—		+	—	—
Anchovia brownii				—	—	
argyrophanus				—		
mitchilli	—			+	—	
Coregonus quadrilateralis	+	—	—			
clupeiformis			—			
labradoricus	—	—	—			
stanleyi	—					
Argyrosomus artedi			—			
Salmo salar	—	—	—	—	—	—
sebago	+					
Cristivomer namaycush	+	—	—			
Salvelinus fontinalis	+	—	—	+	—	—
agassizii		—				
aureolus	—	—	—			
oquassa	—					
Osmerus mordax	+	+	+	+	—	—
spectrum	—					
abbottii	—					
Argentina silus	—					
Trachinocephalus myops				—		
Synodus foetens				+	—	
Maurolicus pennanti				—		
Umbra limi			—			
pygmaea						?
Esox americanus			—	+	—	—
reticulatus	+	+	+	+	—	—
lucius			+			
masquinongy			—			
Fundulus majalis				+	—	—
heteroclitus	—			+	—	—
diaphanus	—			+	—	—
Lucania parva				+		
Cyprinodon variegatus				—		—
Tylosurus marinus	—			+	—	—
acus				—		
Athlennes hians				—		
Hyporhamphus roberti				—	—	
Euleptorhamphus velox				—	—	
Scomberesox saurus	—			+	—	—
Parexocoetus mesogaster					—	
Exocoetus volitans				—		—

	Me.	N.H.	Vt.	Mass.	R. I.	Conn.
Exocoetus rondeletii				—		
Cypsilurus heterurus				—	—	
furcatus					—	
gibbifrons					—	
Eucalia inconstans	—		—			
Pungitius pungitius	—			+	—	—
Gasterosteus aculeatus	+			+	—	+
atkinsii	+					
bispinosus	—			—		—
Apeltes quadracus	—			+	—	—
Fistularia tabacaria				—	—	
Macrorhamphosus scolopax				—		
Syngnathus fuscus	—	—		+	—	—
Hippocampus hudsonius				—	—	
Percopsis guttatus			—			
Menidia beryllina cerea				—	—	
menidia notata	—	—		+	—	+
Mugil cephalus	—			+	—	—
curema				—	—	
trichodon				—		—
Sphyraena barracuda				—		
guachancho				—	—	
borealis				+		
Polydactylus octonemus				—		
Ammodytes dubius				+		
americanus	—			+	—	—
Holocentrus ascensionis				—	—	
Mullus auratus				—		
Scomber scombrus	—			+	—	—
japonicus	—			+		—
Auxis thazard				—	—	
Gymnosarda pelamis				—		
alleterata				—		
Thunnus thynnus	—			+		
Germo alalunga				—		
Sarda sarda	—			+	—	—
Scomberomorus maculatus	—			—	—	—
regalis				+	—	
cavalla				—		
Trichiurus lepturus	—			—	—	
Istiophorus nigricans				—	—	
Tetrapterus imperator				—	—	
Xiphias gladius	+			—	—	—

	Me.	N.H.	Vt.	Mass.	R. I.	Conn.
Oligoplites saurus				—	—	
Naucrates ductor	—			+	—	—
Seriola zonata				+	—	—
lalandi				—	—	
dumerili				—		
Decapterus punctatus				—	—	—
macarellus				—	—	
Trachurus trachurus					—	
Trachurops crumenopthalmus				+	—	
Carangus bartholomaei				—		
hippos				+	—	
crysos				+	—	
Alectis ciliaris				+	—	—
Vomer setapinnis	+			—	—	—
Selene vomer	—			+	—	—
Chloroscombrus chrysurus				?		
Trachinotus falcatus				—	—	
goodei				—		
argenteus				—		
carolinus				—	+	
Pomatomus saltatrix	—			+	—	—
Rachycentron canadus				—		—
Coryphaena hippurus				—		—
Lampris regius	—					
Centrolophus niger				—		
Palinurichthys perciformis	—			+		
Gobiomorus gronovii				—	—	
Peprilus paru				—	—	
Poronotus triacanthus	—	—		+	—	+
Tetragonurus cuvieri				—		
Amploplites rupestris			+			
Enneacanthus obesus				+		
Lepomis auritus	+		+	+	—	—
Eupomotis gibbosus	+	—	+	+	—	—
Micropterus dolomieu	—	+	—	+	—	—
salmoides	—	+	?	+	—	
Stizostedion vitreum			+			
canadense			—			
Perca flavescens	+	+	+	+	—	—
Percina caprodes			—			
Cottogaster copelandi			—			
Boleosoma olmstedi				+	—	—
Boleichthys fusiformis				+		

	Me.	N.H.	Vt.	Mass.	R. I.	Conn.
Gobiosoma bosci				—		—
Echeneis naucrates				+	—	—
naucrateoides				+	+	
Remora remora				—		
brachyptera				—		
Rhombochirus osteochir				—	—	
Opsanus tau	—			+	—	—
Pholis gunnellus	+			+	—	—
Leptoclinus maculatus				—		
Lumpenus lampetræformis	—			—		
Ulvaria subbifurcata	—			—		
Cryptacanthodes maculatus	—	—		+	—	—
Anarhichas minor	—			—		
lupus	+			+	—	
Zoarces anguillaris	—	—		+	—	—
Lycodes reticulatus				—	—	
verrillii				—	—	
Merluccius bilinearis	—			+	—	—
Pollachius virens	+			+	—	—
Microgadus tomcod	—	—		+	—	—
Gadus callarias	—	—		+	—	—
Melanogrammus aeglifinus	—			+	—	—
Lota maculosa	+	—	—	+		—
Urophycis regius	+			—		—
tenuis	—			+	+	—
chesteri				—		
chuss	—			+	—	—
Gaidropsarus argentatus				—		
Enchelyopus cimbrius	+			+		
Brosmius brosme	—	—		+	—	
Macrourus bairdii	—			+		
Hippoglossus hippoglossus	—			+	—	—
Hippoglossoides platessoides				+	—	
Paralichthys dentatus	—			+	—	—
oblongus				+	—	—
Limanda ferruginea	—			—	—	
Pseudopleuronectes americanus	—			+	—	—
Liopsetta putnami	—			—	—	
Glyptocephalus cynoglossus	—			—		
Lophopsetta maculata	—			+	—	+
Achirus fasciatus				+	—	—
Lophius piscatorius	—			+	—	—
Pterophryne histrio				—	—	—
Dibranchus atlanticus					—	

MARSIPOBRANCHII.

HYPEROTRETI.

MYXINIDAE.

1. MYXINE GLUTINOSA Linné.

Hagfish; Borer; Slime-eel.

Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 650. "IN OCEANO." Goode & Bean, Oceanic ichth., 1896, p. 2, pl. 1, fig. 2. Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 7.

ME.— Eastport (Kendall coll. 1893); off Casco Bay (Kendall coll.).

N. H.— Directly east from Portsmouth (Putnam 1873).

HYPEROARTII.

PETROMYZONIDAE.

2. PETROMYZON MARINUS Linné.

Lamprey; Lamper-eel.

Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 230. "IN MARI EUROPAEO." Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 10; 1900, pt. 4, fig. 3.

Petromyzon americanus Lesueur. Storer, Mem. Amer. acad., 1867, vol. 9, p. 251, pl. 38, fig. 4.

Petromyzon nigricans Lesueur. Storer, ibid., p. 253, pl. 39, fig. 6.

ME.— Eastport (U. S. nat. mus. 1872); Bucksport (U. S. nat. mus. 1878); Brunswick (Bowdoin college); Presumpscot River (Me. Fish comm. 1875); Casco Bay (Kendall 1896); Penobscot River (Kendall coll.); Stillwater (Merrill coll. 1898).

N. H.— Merrimac and Pemigewasset rivers (Belknap 1792 and 1813); Merrimac River (N. H. Fish comm. 1886).

VT.— (Thompson 1842); Manchester (N. H. Fish comm. 1891).

HYPEROARTII.

PETROMYZONIDAE.

MASS.— Connecticut River at Northhampton (Lesueur 1818); Massachusetts Bay (Storer 1839); Merrimac River, Lowell (Storer, 1839 & 1867; Lawrence (Holmes coll. B. S. N. H.); Woods Hole (Baird 1873); Beverly (Goode & Bean 1879); North Truro; Monomoy (Kendall coll. 1896); Buzzards Bay (Smith 1898); Nantucket (Sharp & Fowler 1904).

R. I.— Providence River (DeKay 1842); Narragansett Bay; Taunton River (Tracy 1906).

CONN.— Hartford; Stratford; Stonington; Housatonic and Connecticut Rivers (Linsley 1844).

3. PETROMYZON UNICOLOR (DeKay).

Lake lamprey.

Ammocoetes unicolor DeKay, N. Y. fauna, 1842, pt. 4, p. 383, pl. 39, fig. 250 [larva]. "LAKE CHAMPLAIN."

Petromyzon marinus unicolor (DeKay) Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 10. Surface, 4th rept. fisheries, game, & forests N. Y., 18, 1899, p. 194, fig. 1, a, b.

VT.— Lake Champlain (DeKay, 1842).

4. ICHTHYOMYZON CONCOLOR (Kirtland).

Silvery lamprey; Mud-eel; Blind-eel.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 11.

Ammocoetes concolor Kirtland, Bost. journ. nat. hist., 1840, vol. 3, p. 473, pl. [larva]. "MAHONING RIVER; SCIOTO RIVER."

VT.— Winooski River (Thompson, 1842).

PISCES.

SELACHII. DIPLOSPONDYLI.

CHLAMYDOSELACHIDAE.

1. CHLAMYDOSELACHIUS ANGUINEUS Garman.

Frilled shark.

Garman, Bull. Essex. inst., 1884, vol. 16, p. 47. "JAPAN." Bull. mus. comp. zoöl., 1885, vol. 12, p. 1–35, pls. 1–20. Goode & Bean, Oceanic ichth., 1896, p. 508, pl. 6, fig. 22. Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 16.

ME.— New Harbor [?] (Hanna, 1883).

ASTEROSPONDYLI.

GALEIDAE.

2. MUSTELUS CANIS (Mitchill).

Smooth-hound; Smooth-dog.

Storer, Mem. Amer. acad., 1867, vol. 9, p. 227, pl. 37, fig. 2, 2a. Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 29.

Squalus canis Mitchill, Trans. lit. & philos. soc. N. Y., 1815, vol. 1, p. 486. "NEW YORK."

MASS.— Provincetown; Holmes Hole (Storer 1867); Waquoit (Lyman 1872); Salem (Goode & Bean 1879); North Truro; Monomoy; Menemsha Bight (Kendall coll. 1896); Woods Hole (Baird 1873; Bean 1880 and Smith 1898); Nantucket (Sharp & Fowler 1904); Massachusetts Bay (B. S. N. H., Borland coll.).

R. I.— (DeKay 1842); Narragansett Bay (R. I. Fish comm. 1899); Conimicut (Pope coll. 1894–97).

CONN.— Stratford (Linsley 1844); Noank; Newport (Bean 1880).

3. GALEOCERDO TIGRINUS Müller & Henle.

Tiger shark.

Müller & Henle, Plagiostomen, 1841, p. 59, pl. 23.
Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 32.

GALEIDAE.

MASS.— Provincetown [?] (Atwood 1865); Woods Hole (Baird 1873); Vineyard Sound and Buzzards Bay (Smith 1898).

4. PRIONACE GLAUCA (Linné).

Great blue-shark.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 33; 1900, pt. 4, pl. 4, 5, fig. 16, 16a.

Squalus glaucus Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 235. "IN OCEANO EUROPAEO."

MASS.— Woods Hole (Smith 1898); Nantucket (Sharp & Fowler 1904).

5. CARCHARHINUS OBSCURUS (LeSueur).

Dusky shark; Shovelnose.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 31.

Squalus obscurus LeSueur, Journ. acad. nat. sci. Phil., 1818, vol. 1, p. 223, pl. 9, figs, 1, 2, 3, 4 & 5. "NEW YORK."

Carcharias obscurus Storer. Storer, Mem. Amer. acad., 1867, vol. 9, p. 219, pl. 36, fig. 2.

MASS.— Nahant (Storer 1839 & 1847); Provincetown (Storer 1867); Waquoit (Lyman 1872); Massachusetts Bay (Goode & Bean 1879); Woods Hole (Bean 1880 and Smith 1898); Nantucket (Sharp & Fowler 1904).

R. I.— Narragansett Bay (R. I. Fish comm. 1899).

CONN.— Stratford (Linsley 1844).

6. CARCHARHINUS MILBERTI (Müller & Henle).

Blue shark.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 37.

Carcharias (Prionodon) milberti Müller & Henle, Plagiostomen, 1841, p. 38, pl. 19, fig. 3 (teeth). "IM MITTELMEER UND IM OCEAN."

GALEIDAE.

Lamna caudata De Kay, N. Y. fauna, 1842, pt. 4, p. 354, pl. 62, fig. 205.

MASS.— Woods Hole (Baird 1873 and Smith 1898).
R. I.— Brenton Reef (DeKay 1842).

7. CARCHARHINUS LIMBATUS (Müller & Henle).

Spotted-fin shark.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 40.
Carcharias (*Prionodon*) *limbatus* Müller & Henle, Plagiostomen, 1841, p. 49. "MARTINIQUE."

MASS.— Woods Hole (Smith 1898).

SPHYRNIDAE.

8. SPHYRNA ZYGAENA (Linné).

Hammerhead shark; Hammerhead.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 45.
Squalus zygaena Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 234. "EUROPA; AMERICA."
Zygaena malleus Val. Storer, Mem. Amer. acad., 1867, vol. 9, p. 238, pl. 38, fig. 3.
MASS.— Holmes Hole (Storer 1839); Chatham; Cape Cod (Storer 1842); Holmes Hole (Storer 1842 and 1867); Chatham; Provincetown (Storer 1848); Woods Hole (Baird 1873 and Smith 1898); Nantucket (Sharp and Fowler 1904).
R. I.— Narragansett Bay (R. I. Fish comm. 1899).
CONN.— Noank (Goode 1879).

ALOPIIDAE.

9. ALOPIAS VULPES (Gmelin).

Thresher; Thrasher; Swingle-tail; Swivel-tail.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 45; 1900, pt. 4, pl. 6, fig. 20.

ALOPIIDAE.

Squalus vulpes Gmelin, Syst., nat., 1788, vol. 1, p. 1496. "MEDITERRANEAN."

Carcharias vulpes Cuv. Storer, Mem. Amer. acad., 1867, vol. 9, p. 221, pl. 36, fig. 3.

ME.— Eastport (Kendall coll. 1893); East of Matinicus and off Monhegan (Kendall coll. 1895).

MASS.— Nahant (Storer 1839); Eastside of Boston Harbor (Jackson 1852); Massachusetts Bay (Storer 1867); Provincetown (Atwood 1865); Woods Hole (Baird 1873); Vineyard Sound; Menemsha Bight; Buzzards Bay (Smith 1898); Nantucket (Sharp & Fowler 1904).

R. I.— Narragansett Bay (R. I. Fish comm. 1899).

CONN.— Stonington (Linsley 1844).

CARCHARIIDAE.

10. CARCHARIAS LITTORALIS (Mitchill).

Sand shark; Shovel nose shark; Dogfish shark.

Squalus littoralis Mitchill, Amer. month. mag. & crit. rev., 1818, vol. 2, p. 328. "NEW YORK."

Carcharias griseus Ayres. Storer, Mem. Amer. acad., 1867, vol. 9, p. 217, pl. 36, fig. 1.

Carcharias littoralis (Mitchill). Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 46.

ME.— Casco Bay at Small Point (Kendall coll. 1896).

MASS.— Lynn (Storer 1842 and 1842) Waquoit (Lyman 1872); Boston Bay (B. S. N. H., Cutting coll.); Provincetown; Nantucket (Goode 1884); Provincetown (Storer 1843?); North Truro; Monomoy; Menemsha Bight (Kendall coll. 1896); Woods Hole (Baird 1873; Smith 1898); Nantucket (Sharp & Fowler 1904).

R. I.— Narragansett Bay at Conimicut (Pope coll. 1894–97).

LAMNIDAE.

11. Isurus dekayi (Gill).

Mackerel shark.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 48, 1900; pt. 4, pl. 6, fig. 21.

Isuropsis dekayi Gill, Ann. lyc. nat. hist. N. Y., 1861, vol. 7, p. 409.

Lamna punctata Mitchill. Storer, Report, 1839, p. 185, pl. 3, fig. 2.

Me.— Casco Bay (U. S. Nat. Mus. 1873).

Mass.— "In our bay" (Storer 1839); Marshfield (Storer 1839); Woods Hole (Baird 1873); Vineyard Sound; Buzzards Bay (Smith 1898); Nantucket (Sharp & Fowler 1904).

R. I.— Tiverton; Point Judith (U. S. nat. mus. 1887); Narragansett Bay (R. I. Fish comm. 1899).

Conn.— Oyster River; Stratford (Linsley 1844).

12. Lamna cornubica (Gmelin).

Mackerel shark; Blue shark.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 49; 1900, pt. 4, pl. 6, fig. 22.

Squalus cornubicus Gmelin, Syst. nat., 1788, vol. 1, p. 1497. "Shores of Cornwall."

Lamna punctata Mitchill. Storer, Mem. Amer. acad., 1867, vol. 9, p. 225, pl. 37, fig. 1.

Me.— Off Monhegan (Storer 1867; Kendall coll. 1895); Casco Bay (Bowdoin College); off Cape Elizabeth (Norton coll. 1905).

Mass.— Provincetown (Storer 1867); off Gloucester (Goode & Bean 1879).

R. I.— (Tracy 1906).

13. Carcharodon carcharias (Linné).

Maneater; Great white shark.

Jordan & Evermann, Bull. 47, U. S. nat. mus. 1896, pt. 1, p. 50.

SELACHII. ASTEROSPONDYLI.

LAMNIDAE.

Squalus carcharias Linné, Syst. nat., ed. 10, 1758, p. 235. "EUROPA."

Carcharias atwoodi Storer. Storer, Mem. Amer. acad., 1867, vol. 9, p. 222, pl. 36, fig. 4.

ME.— Eastport (Goode 1884).

MASS.— Provincetown (Storer 1848 and 1854, 1867); Waquoit (Lyman 1872); Massachusetts Bay (Goode & Bean 1879); Woods Hole (Baird 1873 and Smith 1898).

CETORHINIDAE.

14. CETORHINUS MAXIMUS (Gunner).

Basking shark; Bone shark.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1891, pt. 1, p. 51; 1900, pt. 4, pl. 7, fig. 23.

Squalus maximus Gunner, Trondhjem selskabskr, 1765, vol. 3, p. 33. "COAST OF NORWAY."

Selachus maximus Cuv. Storer, Mem. Amer. acad., 1867, vol. 9, p. 229, pl. 37, fig. 3.

ME.— Off Cape Elizabeth (Storer 1867); Eastport (Verrill 1870).

MASS.— Provincetown (Mitchill 1815 and Storer 1839, 1840 and 1867).

CYCLOSPONDYLI.

SQUALIDAE.

15. SQUALUS ACANTHIAS Linné.

Dogfish.

Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 233. "IN OCEANO EUROPAEO." Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 54; 1900, pt. 4, pl. 8, figs. 24, 24a.

SQUALIDAE.

Acanthias americanus Storer. Storer, Mem. Amer. acad., 1867, vol. 9, p. 232, pl. 38, figs. 1, 1a.

ME.— Eastport (U. S. nat. mus. 1872; Bean 1880); Matinicus; Isle au Haute; Stockton Springs; Searsport; Gotts Island; Mt. Desert Rock; Sandy Point (Evermann 1903); Casco Bay (Bowdoin College; Kendall coll.).

MASS.— (Storer 1846) West Yarmouth (Lyman 1861); Provincetown; Massachusetts Bay; Marthas-Vineyard (Storer 1867); Waquoit (Lyman 1872); Woods Hole (Baird 1873; Bean 1880 and Smith 1898); Gloucester (Bean 1880); Nantucket (Sharp & Fowler 1904).

R. I.— (Tracy 1906).

16. CENTROSCYMNUS COELOLEPIS Bocage & Capello.

Bocage & Capello, Proc. zool. soc. London, 1864, p. 263, fig. 4. "PORTUGAL." Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 55; 1900, pt. 4, pl. 8, fig. 25.

MASS.— Off Gloucester (Jordan & Evermann 1896).

17. CENTROSCYLLIUM FABRICII (Reinhardt).

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 56; 1900, pt. 4, pl. 8, fig. 26.

Spinax fabricii Reinhardt, Dansk. vid. selsk. forh., 1828, vol. 3, p. 14. "GREENLAND."

MASS.— Off Gloucester (Bean 1880 and Jordan & Evermann 1896).

SOMNIOSIDAE.

18. SOMNIOSUS MICROCEPHALUS (Bloch & Schneider).

Sleeper shark; Nurse.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 57.

Squalus microcephalus Bloch & Schneider, Syst. ichth., 1801, p. 135. "NORTHERN SEAS."

SELACHII. CYCLOSPONDYLI.

SOMNIOSIDAE.

Scymnus brevipinna DeKay. Storer, Mem. Amer. acad., 1867, vol. 9, p. 235, pl. 38, fig. 2.

ME.— Eastport (U. S. nat. mus. 1872); off Portland Wood 1846); Portland (Goode & Bean 1896).

MASS.— Marblehead (LeSueur 1818); Coast of Massachusetts (Kneeland, 1847); Nahant (Storer 1849 and 1867); Provincetown (Storer 1848 and 1867).

ECHINORHINIDAE.

19. ECHINORHINUS SPINOSUS (Gmelin).

Goode & Bean, Oceanic ichth., 1896, p. 8, pl. 3, fig. 9. Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 4, 58.

Squalus spinosus Gmelin, Syst. nat., 1788, vol. 1, p. 1500. "THE OCEAN."

MASS.— Provincetown (Goode & Bean 1879 and 1896).

SQUATINIDAE.

20. SQUATINA SQUATINA (Linné).

Angelfish; Monkfish.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 58.

Squalus squatina Linné, Syst, nat., ed. 10, 1758, vol. 1, p. 233. "IN OCEANO EUROPAEO."

Squatina dumerili DeKay, N. Y. fauna, 1842, pt. 4, p. 363, pl. 62, fig. 203.

MASS.— Woods Hole (Baird 1873) Menemsha Bight (Smith 1898).

BATOIDEI.

RAJIDAE.

21. RAJA ERINACEA Mitchill.

Little skate; Bonnet skate.

Mitchill, Amer. journ. sci., 1825, vol. 9, p. 291. "NEW YORK."

RAJIDAE.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 68; 1900, pt. 4, pl. 9, fig. 29.

Raia diaphanes Mitchill. Storer, Mem. Amer. acad., 1867, vol. 9, p. 240 [in part], pl. 39, fig. 1?

ME.— Eastport (U. S. nat. mus., 1872); Casco Bay (Bowdoin College; Kendall coll.).

MASS.— Provincetown; Nahant; Charles River (Storer 1863); Massachusetts Bay (B. S. N. H., Cutting coll.); Waquoit (Lyman 1872); North Truro; Monomoy; Menemsha Bight (Kendall coll. 1896); Woods Hole; Provincetown, Gloucester (Bean 1880); Woods Hole (Baird 1873 and Smith 1898); Nantucket (Sharp & Fowler 1904).

R. I.— Narragansett Bay (R. I. Fish comm. 1899); Conimicut (Pope coll. 1894–97).

CONN.— Mouth Connecticut River (Garman 1874); Noank (Bean 1880) Long Island Sound, off Bridgeport; off Stratford and Middle Ground (Kendall coll. 1890); off S. W. Ledge; off Brandford Beacon; off Faulkners Island (Kendall coll. 1892).

22. RAJA OCELLATA Mitchill.

Big skate; Winter skate.

Mitchill, Trans. lit. & philos. soc. N. Y., 1815, vol. 1, p. 477. "NEW YORK." Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 68; 1900, pt. 4, pl. 10, fig. 50.

Raia diaphanes Mitchill. Storer, Mem. Amer. acad., 1867, vol. 9, p. 240 [in part].

ME.— Eastport (U. S. nat. mus., 1872); Portland Goode & Bean 1879); Smallpoint, Casco Bay (Kendall coll. 1896).

MASS.— Provincetown (Storer 1863); Waquoit (Lyman 1872); Nahant (Garman 1874); Woods Hole; Provincetown; Gloucester (Bean 1880); North Truro; Monomoy (Kendall coll. 1896); Woods Hole (Baird 1873 and Smith 1898).

R. I.—Narragansett Bay (Tracy 1906).

SELACHII. BATOIDEI.

RAJIDAE.

CONN.— Stratford (Linsley 1843?); Long Island Sound, off Bridgeport and Stratford (Kendall coll. 1890).

23. RAJA RADIATA Donovan.

Prickly skate.

Donovan, Hist. Brit. fishes, 1808, vol. 5, p. 94, pl. "GREAT BRITAIN." Goode & Bean, Oceanic ichth., 1896, p. 508, pl. 9, fig. 27. Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 69.

ME.— Casco Bay (Portland soc. nat. hist.).

MASS.— Nahant (Garman 1874); Annisquam (B. S. N. H.); Salem; Gloucester; Provincetown (Bean 1880); Woods Hole (Bean 1880 & Smith 1898).

CONN.— New London [?] (Linsley 1844); Noank (B. S. N. H., Hyatt & Rathbun coll.).

24. RAJA EGLANTERIA (Bosc).

Briar skate.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 71.

Raia eglanteria Bosc. Lacépède, Hist. nat. poissons 1800, vol. 2, p. 103. "CHARLESTON, S. C."

? *Raja ocellata* De Kay, N. Y. fauna, 1842, pt. 4, p. 369, pl. 65, fig. 212.

MASS.— Penikese Island (Garman 1874); Gloucester; Provincetown (Bean 1880); Menemsha Bight (Smith 1898).

CONN.— Stratford (Linsley 1844); Noank (B. S. N. H.).

25. RAJA SENTA Garman.

Garman, Proc. U. S. nat. mus., 1885, vol. 8, p. 43. "CAPE COD BAY." Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 71.

MASS.— Cape Cod Bay (Garman 1885).

RAJIDAE.

26. Raja laevis Mitchill.

Barndoor skate.

Mitchill, Amer. month. mag. & crit. rev., 1817, vol. 2, p. 327. "New York." Goode & Bean, Oceanic ichth., 1896, p. 28, pl. 9, fig. 29. Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 71.

Raia laevis Mitchill. Storer, Mem. Amer. acad., 1867, vol. 9, p. 242, pl. 39, fig. 2.

Me.— Eastport (U. S. nat mus., 1872); Casco Bay (Kendall coll. 1896).

Mass.— New Bedford (Storer 1839); Massachusetts Bay (Storer 1863; Garman 1874); Waquoit (Lyman 1872); Woods Hole (Baird 1873 and Smith 1898); Nantucket (Sharp & Fowler 1904).

R. I.— (Tracy 1906).

Conn.— (Linsley 1844); Noank (Goode 1879).

NARCOBATIDAE.

27. Tetronarce occidentalis (Storer).

Torpedo; Numbfish; Crampfish.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 77; 1900, pt. 4, pl. 11, fig. 33.

Torpedo occidentalis Storer, Amer. journ. sci., 1843, vol. 44, p. 165, pl. 3. "Massachusetts." Mem. Amer. acad., 1867, vol. 9, p. 247, pl. 39, fig. 5.

Me.— Off Seguin; Casco Bay (Smith & Kendall 1897).

Mass.— Truro (Storer 1839); Chilmark 3 miles from Gay Head (Storer 1847); Provincetown (Storer 1843, 1845, 1845b and 1863); Wellfleet (Storer 1839, 1843?, 1843 and 1863). Thatchers Island;

NARCOBATIDAE.

Lanesville (Goode & Bean 1879); Woods Hole (Baird 1873 and Smith 1898).

R. I.— Narragansett Bay (R. I. Fish comm. 1899); off Sakonnet (Tracy 1906).

CONN.— Stratford (Linsley 1844).

DASYATIDAE.

28. DASYATIS CENTRURA (Mitchill).

Sting ray; Stingaree; Clam-cracker.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 83.

Raja centrura Mitchill Trans. lit. and philos. soc. N. Y., 1815, vol. 1, p. 479. "COAST OF LONG ISLAND."

Pastinaca hastata DeKay. Storer, Mem. Amer. acad., 1867, vol. 9, p. 244, pl. 39, fig. 3.

MASS.— Holmes Hole (Storer 1842, 1842, and 1863); Chatham (Storer 1857 and 1863); Woods Hole (Baird 1873 and Smith 1898).

R. I.— Narragansett Bay (R. I. Fish comm. 1899).

CONN.— Stratford (Linsley 1844).

29. DASYATIS HASTATA (DeKay).

Sting ray.

Jordan & Evermann, Bull. 47 U. S. nat. mus., 1896, pt. 1, p. 83.

Pastinaca hastata DeKay, N. Y. fauna, 1842, pt. 4, p. 373, pl. 65, fig. 214. "RHODE ISLAND."

MASS.— Holmes Hole (Storer 1842); Chatham (Storer 1858).

R. I.— (DeKay 1842).

30. PTEROPLATEA MACLURA (LeSueur).

Butterfly ray.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 86.

Raja maclura LeSueur, Journ. acad. nat. sci. Phil., 1817, vol. 1, p. 41, pl. [1], figs. 1, 2, a, b, c. "NEWPORT, R. I."

DASYATIDAE.

Pastinaca maclura LeSueur. DeKay, N. Y. fauna, 1842, pt. 4, p. 375, pl. 65, fig. 213.

MASS.— Woods Hole (Baird 1873 and Smith 1898).

R. I.— Newport LeSueur 1817; De Kay 1842); Narragansett Bay (R. I. Fish comm. 1899).

CONN.— Saybrook; New Haven (Linsley 1844).

MYLIOBATIDAE.

31. MYLIOBATIS FREMINVILLEI LeSueur.

Eagle ray.

LeSueur, Journ. acad. nat. sci. Phil., 1824, vol. 4, p. 111. "RHODE ISLAND." Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 89.

Myliobatis acuta Ayres. Storer, Mem. Amer. acad., 1867, vol. 9, p. 245, pl. 39, fig. 4.

MASS.— Holmes Hole (Storer 1841, 1842, and 1863); Waquoit (Lyman 1872); Woods Hole (Baird 1873 and Smith 1898).

R. I.— (LeSueur 1824); Narragansett Bay (Tracy 1906).

CONN.— (Ayres 1841; Linsley 1844); Noank (Garman 1885).

32. RHINOPTERA BONASUS (Mitchill).

Cow-nose ray.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 90.

Raja bonasus Mitchill, Trans. lit. & philos. soc. N. Y., 1815, vol. 1, p. 479. "NEW YORK."

Rhinoptera quadriloba LeSueur. DeKay, N. Y. fauna, 1842, pt. 4, p. 375, pl. 66, fig. 217.

MASS.— Woods Hole (Baird 1873 and Smith 1898); Nantucket (Sharp & Fowler 1904).

R. I.— Narragansett Bay (R. I. Fish comm. 1899); off Block Island (Tracy 1906).

CONN.— Stratford (Linsley 1844).

TELEOSTOMI. CHONDROSTEI.

ACIPENSERIDAE.

33. ACIPENSER STURIO Linné.

Common sturgeon.

Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 237. "MARI EUROPAEO." Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 105; 1900, pt. 4, pl. 20, fig. 45.

Acipenser oxyrhinchus Mitchill. Storer, Mem. Amer. acad., 1863, vol. 8, p. 431, pl. 35, fig. 4.

ME.— Kennebec River (Storer 1863); Androscoggin River (Atkins 1887); Cathance River, tributary of Kennebec (Kendall coll. 1901); Penobscot River and Bay (Evermann 1903).

MASS.— Charles River at Watertown (Storer 1839); Deer Island (Storer 1842); outside Boston Harbor; Truro (B. S. N. H.); Provincetown (Storer 1863); Waquoit (Lyman 1872); Merrimac River at Lawrence (Goode & Bean 1879); Monomoy (Kendall coll. 1896); Menemsha Bight; Woods Hole (Baird 1873 and Smith 1898); Nantucket (Sharp & Fowler 1904).

R. I.— Narragansett Bay (R. I. Fish comm. 1899); off Sakonnet; off Quonset; Block Island (Tracy 1906).

CONN.— Long Island Sound (Linsley 1844).

34. ACIPENSER RUBICUNDUS LeSueur.

Lake sturgeon; Stone sturgeon; Rock sturgeon.

LeSueur, Trans. Amer. philos. soc., 1818, vol. 1, p. 388, pl. 12. "LAKES ONTARIO, ERIE, AND ALL THE UPPER LAKES." Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 106; 1900, pt. 4, pl. 21, fig. 46.

VT.— Lake Champlain (Thompson 1842; Evermann & Kendall 1894); (Storer 1842).

35. ACIPENSER BREVIROSTRUM LeSueur.

Short-nose sturgeon.

LeSueur, Trans. Amer. philos. soc., 1818, vol. 1, p. 390. "DELA-

ACIPENSERIDAE.

WARE RIVER." Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 106.

MASS.— Boston Harbor [?] (Durkee 1855); Waquoit [?] (Lyman 1872); Rockport [?] (Goode & Bean 1879); Woods Hole [?] (Baird 1873 and Smith 1898).

R. I.—[?] (Tracy 1906).

RHOMBOGANOIDEA.

LEPISOSTEIDAE.

36. LEPISOSTEUS OSSEUS (Linné).

Gar; Gar-pike.

Jordan & Evermann, Bull. 47 U. S. nat. mus., 1896, pt. 1, p. 109.

Esox osseus Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 313. "AMERICA SEPTENTRIONALI, ASIA."

Lepisosteus lineatus Thompson, Hist. Vermont, 1842, p. 145, fig. [young].

Lepisosteus bison DeKay, N. Y. fauna, 1842, pt. 4, p. 271, pl. 43, fig. 139.

VT.— Lake Champlain; Winooski River (Thompson 1842); (Storer 1842).

CYCLOGANOIDEA.

AMIIDAE.

37. AMIA CALVA Linné.

Mudfish; Dogfish; Bowfish; Grindle.

Linné, Syst. nat., ed. 12, 1766, vol. 1, p. 500. "CAROLINAE AQUIS DULCIBUS, VARIUS ESCULENTUS." Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 113; 1900, pt. 4, pl. 22, fig. 51.

Amia ocellicauda Thompson, Hist. Vermont. Appendix, 1842, p. 35.

TELEOSTOMI. CYCLOGANOIDEA.

AMIIDAE.

VT.— Whitehall, Otter Creek; Lake Champlain; Winooski River (Thompson 1853).

NEMATOGNATHI.

SILURIDAE.

38. FELICHTHYS MARINUS (Mitchill).

Gafftopsail cat.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 118; 1900, pt. 4, pl. 23, fig. 52.

Silurus marinus Mitchill, Trans. lit. & philos. soc. N. Y., 1815, vol. 1, p. 433. "NEW YORK."

MASS.— Woods Hole (Baird 1873); New Bedford (Goode 1879); Menemsha Bight (Smith 1898).

R. I.— Brentons Reef (Tracy 1906); Newport (B. S. N. H. Powell coll.).

39. GALEICHTHYS FELIS (Linné).

Sea catfish.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 128; 1900, pt. 4, pl. 23, fig. 52.

Silurus felis Linné, Syst. nat., ed. 12, 1766, vol. 1, p. 503. "CAROLINA."

MASS.— Vineyard Sound (Smith 1898).

R. I.— Narragansett Bay (R. I. Fish comm. 1899).

40. AMEIURUS LACUSTRIS (Walbaum).

Great forked-tail cat; Mathemeg.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 137.

Gadus lacustris Walbaum, Artedi Pisc., 1792, p. 144. "ARCTIC AMERICA."

VT.— Lake Champlain; Winooski River (Thompson 1842); Lake Champlain at Swanton (Evermann & Kendall 1894).

SILURIDAE.

41. AMEIURUS VULGARIS Thompson.

Bullhead.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 140.

Pimelodus vulgaris Thompson, Hist. Vermont, 1842, p. 138. "LAKE CHAMPLAIN." Jordan, Bull. 10, U. S. nat. mus., 1877, p. 88, pl. 18, fig. 33; pl. 19, fig. 34.

VT.— Lake Champlain (Thompson 1842).

42. AMEIURUS NEBULOSUS (LeSueur).

Bullhead; Hornpout; Minister.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 140.

Pimelodus nebulosus LeSueur, Mem. mus., 1819, vol. 5, p. 149. "LAKE ONTARIO."

Pimelodus atrarius DeKay. Storer, Mem. Amer. acad., 1855, vol. 5, p. 279, pl. 20, fig. 3.

ME.— Almost everywhere common. Sebago Lake and outlet (B. S. N. H., Putnam coll.); St. Croix; St. Johns; Union Penobscot; Kennebec; Androscoggin and Presumpscot river basins (Kendall coll.).

N. H.— Almost everywhere common. Cold, Caldwell, Warrens, Pout, Great, Boyces, Bradford, Todds, Goose, Clark, Mud, Lily, Indian, Clarksville, Butternut, Stocker, Eastmans, Miller, Angle, Island, Wash, Long, White Oak, Flints, Pennichuck, Rocky, Lakins, Hinmans, Sawyers, Clay, Smiths, Clements, Grassy, Rolfes, Carrs, Little Massabessic, Otternick, Cherry, Great, Country, Little, Crooked, Spaldings, Cedar, Nays, Pratts, Clarks, Otter, Little Sunapee, Suncook, Jennes, Little Bow, Harvey, Knowltons, Duncan, Gumpars, Whites, Cunningham, Moses, Cass, Captains, Worldsend, Hunkins, Morgan, Baptist, Bow, Little Bow, Trout, Boulster, Cones, Bear, Pleasant, Jones, Simmons, Day, Great, Bakers, Line, Cabots, Policy, Hititite, Nut-

chells, Beach, Sargent and Bartons ponds, and Squam Lake. (N. H. Fish comm.).

VT.— Connecticut River & larger tributaries; Barnat (Thompson 1842); Connecticut River; Lake Champlain; Clyde River; Lake Memphremagog (Evermann & Kendall 1894).

MASS.— "Throughout the state" (Storer 1855); Jamaica Plains (B. S. N. H., Van Vleck & Henshaw coll.); Warwick (B. S. N. H., Putnam coll.); East Wareham (Goode 1879); Quashnet River, Falmouth (Kendall coll. 1894).

R. I.— Mashapaug, Randalls, Benedict and Fenners ponds; Ponegansett Reservoir; Pocassett River (Pope coll. 1888–1896).

CONN.— Salsbury Lake; Thatcherville Factory Pond, near Bridgeport (Linsley 1844).

EVENTOGNATHI.

CATOSTOMIDAE.

43. CARPIODES THOMPSONI Agassiz.

Carp-sucker; Buffalo; Drum.

Agassiz, Amer. journ. sci., 1855, vol. 19, p. 191. "LAKE CHAMPLAIN." Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 167.

VT.— Lake Champlain (Agassiz 1855; Evermann & Kendall 1894).

44. CATOSTOMUS CATOSTOMUS (Forster).

Long-nose sucker; Red sucker.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 176; 1900, pt. 4, pl. 32, fig. 77.

Cyprinus catostomus Forster, Philos. trans., 1773, p. 155. "STREAMS ABOUT HUDSON BAY."

TELEOSTOMI. EVENTOGNATHI.

CATOSTOMIDAE.

Me.— Cupsuptic Lake (B. S. N. H., Putnam coll.); Craigs Brook; Alamoosook Lake; Toddy Pond; Glasier Lake; Eagle Lakes, Aroostook County (Kendall 1902); Umbagog Lake (Kendall & Goldsborough coll. 1905).

N. H.— Connecticut Lakes and tributaries of Upper Connecticut River (Kendall & Goldsborough coll. 1904); Umbagog Lake (Kendall & Goldsborough coll. 1905).

Vt.— (LeSueur, 1817); Sleeper River; Caspian Lake (Evermann & Kendall 1902).

45. Catostomus commersonii (Lacépède).

Sucker; White sucker; Black sucker.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 178; 1900, pt. 4, pl. 34, fig. 83.

Cyprinus commersonii Lacépède, Hist. nat. poissons, 1803, vol. 5, p. 502.

Catostomus bostoniensis LeSueur. Storer, Mem. Amer. acad., 1855, vol. 5, p. 290, pl. 22, fig. 3.

Me.— Everywhere abundant. Moosehead Lake (B. S. N. H. Davidson coll.). Cambridge River, Upton; Sebago Lake and outlet (B. S. N. H. Putnam coll.); St. Johns, St. Croix; Union; Penobscot; Androscoggin, Kennebec, Presumbscot river basins and many other localities (Kendall coll.).

N. H.— Everywhere common. Stocker, Angle, Island, Wash, Big Dummer, Little Dummer, Corner, Otter, Little Sunapee, Moses, Stinsons, Bow and Great ponds (N. H. Fish comm.). Connecticut Lakes and tributaries of upper Connecticut River (Kendall & Goldsborough coll. 1904); Umbagog Lake (Kendall & Goldsborough coll. 1905).

Vt.— Common everywhere. (Thompson 1842); Lake Champlain; Passumpsic River, Clyde River; Memphremagog and Caspian lakes (Evermann & Kendall 1902).

TELEOSTOMI. EVENTOGNATHI.

CATOSTOMIDAE.

MASS.— Neighborhood of Boston (Le Sueur 1817); Charles River at Watertown (Storer 1839 and 1855); Williamstown (B. S. N. H. Buck & Nason coll.); Fresh Pond, Cambridge (B. S. N. H. Van Vleck coll.); very common (Goode & Bean 1879); Quashnet River, Falmouth (Kendall coll. 1894); near Woods Hole (Smith 1898).

R. I.— "Narragansett Bay" (R. I. Fish comm. 1899); Mashapaug Pond (Pope coll. 1895).

CONN.— (DeKay 1842); "Passim" (Linsley 1844).

46. CATOSTOMUS NIGRICANS LeSueur.

Hog-sucker; Stone roller; Black sucker.

LeSueur, Journ. acad. nat. sci. Phil., 1817, vol. 1, p. 102. "LAKE ERIE." Bean, Fish Penn., 1893, p. 26, pl. 21, fig. 31. Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 181.

VT.— Sleeper River at St. Johnsbury (Evermann & Kendall 1894).

MASS.— Walpole [?] (Storer 1839).

47. ERIMYZON OBLONGUS (Mitchill).

Chubsucker; Roach; Barvel.

Cyprinus oblongus Mitchill, Rept. fish. N. Y., 1814, p. 22, fresh streams and lakes ["NEW YORK"].

Catostomus tuberculatus DeKay, N. Y. fauna, 1842, pt. 4, p. 190 [in part].

Catostomus gibbosus LeSueur. Storer, Mem. Amer. acad., 1855, vol. 5, p. 291, pl. 22, fig. 4.

Erimyzon sucetta oblongus (Mitchill) Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 186.

ME.— Sebago Lake, Little Sebago Lake; Thomas Pond; Songo and Presumbscot rivers (Kendall coll.).

TELEOSTOMI. EVENTOGNATHI.

CATOSTOMIDAE.

N. H.— (DeKay 1842); Squam Lake; White Oak Pond (N. H. Fish comm.).

Vt.— [?] (Storer 1843).

Mass.— Connecticut River, Northampton (LeSueur 1817; Storer 1839); Watertown (Storer 1839); Miles River, Menham (Goode & Bean 1879); Quashnet River, Falmouth (Kendall coll. 1894); Fresh Pond Cambridge (B. S. N. H. Van Vleck coll.).

R. I.— "Narragansett Bay," (R. I. Fish comm. 1899).

Conn.— "Housatonic" (Linsley 1844).

48. Moxostoma aureolum (LeSueur).

Redhorse; Mullet; Red-fin sucker.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 192.

Catostomus aureolus LeSueur, Journ. acad. nat. sci. Phil., 1817, vol. 1, pl. [18], p. 95. "Lake Erie, near Buffalo." DeKay, N. Y. fauna, 1842, pt. 4, p. 201, pl. 42, fig. 133.

Vt.— Lake Champlain (Thompson 1842; Evermann & Kendall 1894).

CYPRINIDAE.

49. Chrosomus erythrogaster Rafinesque.

Red-bellied minnow.

Rafinesque, Ichth. Ohioensis, 1820, p. 47. "Ohio River." Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 209. Bean, Fish. Penn., 1893, p. 32, pl. 22, fig. 35.

Me.— Freeport (Kendall & Smith 1894); Eagle Lakes, Aroostook Co.; Matagamon River; Matagamonsis Lake; Penobscot River at Bangor; Cobbosseecontee Lake; Lake Auburn (Kendall coll.).

N. H.— Indian Stream tributary of Upper Connecticut River, near Pittsburg, Coos County (Kendall & Goldsborough coll. 1904).

TELEOSTOMI. EVENTOGNATHI.

CYPRINIDAE.

50. PIMEPHALES NOTATUS (Rafinesque).

Blunt-nose minnow.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 218.

Minnilus notatus Rafinesque, Ichth. Ohioensis, 1820, p. 47. "OHIO RIVER."

Hyborhynchus notatus (Raf.), Cope, Trans. Amer. philos. soc., 1869, vol. 13, p. 392, pl. 13, fig. 5.

VT.— Lake Champlain (Evermann & Kendall 1894); Swanton (Carter coll. 1907).

51. PIMEPHALES ANULI Kendall.

Blunt-nose; Rings minnow.

Kendall, Bull. U. S. fish comm., 1903, vol. 22, p. 360, fig. "CROSS LAKE THOROUGHFARE, EAGLE LAKES, AROOSTOOK COUNTY, MAINE."

ME.— Eagle Lakes, Aroostook County; Lunkasoos Lake, Penobscot County (Kendall 1903).

52. SEMOTILUS BULLARIS (Rafinesque).

Chub; Dace; Chiven.

Cyprinus bullaris Rafinesque, Amer. month. mag. & crit. rev., 1817, vol. 1, p. 120. "HUDSON RIVER AND WORD CREEK."

Cheilonemus pulchellus Girard. Storer, Mem. Amer. acad., 1855, vol. 5, p. 286, pl. 22, fig. 2.

Semotilus corporalis (Mitchill). Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 221.

ME.— Almost everywhere abundant. Richardson Lake & Metallick Brook; Sebago Lake and outlet (B. S. N. H., Putnam coll.); Moosehead Lake (B. S. N. H., Davidson coll.); St. Johns;

St. Croix, Union, Penobscot; Kennebec; Androscoggin, Presumpscot river basins (Kendall coll.).

N. H.— Everywhere. Squam Lake and Winnipesaukee (B. S. N. H., Storer coll.); Connecticut Lakes and Upper Connecticut River waters (Kendall & Goldsborough coll. 1904).

VT.— Lake Champlain (Thompson 1842).

MASS.—Almost everywhere. Worcester County; Walpole (Storer 1839); Menham Lake (Goode & Bean 1879); New Bedford (Goode 1879); South Hadley Falls (Bean 1880); Quashnet River, Falmouth (Kendall coll. 1894); Boston and Waltham (B. S. N. H.); Ipswich (B. S. N. H., Brown coll.).

CONN.— "Common" (Linsley 1844).

53. SEMOTILUS ATROMACULATUS (Mitchill).

Horned dace; Mummychub; Mud-chub.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 222; 1900, pt. 4, pl. 40, fig. 100.

Cyprinus atromaculatus Mitchill, Amer. monthly mag. & crit. rev., 1818, vol. 2, p. 324. "WALLKILL RIVER, NEW YORK."

ME.— Widely common. (Linsley 1844); Freeport (Kendall & Smith 1894); Eagle Lakes, Aroostook County; Allagash River lakes; Matagamon River waters; West Branch Penobscot River waters; Union River basin; Kennebec River waters; Androscoggin River waters; Royals River basins (Kendall coll.); Matagamon waters (Smith 1902).

N. H.— Upper Connecticut River and tributaries; Connecticut Lakes (Kendall & Goldsborough coll. 1904).

VT.— Western part of Vermont (Thompson 1853); Clyde River; Memphremagog Lake (Evermann & Kendall 1894); East Creek & Caspian Lake (Evermann & Kendall 1902).

MASS.— Housatonic River (?); Brooks near Williams College [?] (Storer [Putnam] 1867).

TELEOSTOMI. EVENTOGNATHI.

CYPRINIDAE.

CONN.— Stratford; Canaan (Linsley 1844); Fairfield County (Ayres 1850).

54. LEUCISCUS CARLETONI Kendall.

Carletons Chub-minnow.

Kendall, Bull. U. S. fish comm., 1903, vol. 22, p. 357, fig. 1. "BILL FISH BROOK, TRIBUTARY OF EAST BRANCH PENOBSCOT RIVER, A MILE BELOW MATAGAMON LAKE."

ME.— Bill Fish Brook, tributary of Matagamon River; Southards pond, tributary of Hale Pond of West Branch of Penobscot River; Smith Brook, outlet of Haymock Lake, tributary of Allagash River; Eagle Lakes, Aroostook County (Kendall 1903); Bangor (Bowdoin College).

55. PHOXINUS NEOGAEUS Cope.

Bronze minnow.

Cope, Trans. Amer. philos. soc., 1869, vol. 13, p. 375. "NEW HUDSON, LIVINGSTONE COUNTY, MICHIGAN."

Leuciscus neogaeus (Cope). Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 240. Kendall, Bull. U. S. fish comm., 1903, vol. 22, p. 356.

ME.— Bill Fish Brook, tributary of Matagamon River; Matagamonsis Lake; Southards Pond near Hale Pond, tributary of West Branch of Penobscot River; Smith Brook, outlet Haymock Lake, tributary of Allagash River (Eagle Lake); Cross Lake Thoroughfare, Eagle Lakes, Aroostook County; Lunkasoos Lake, tributary of Matagamonsis Lake (Kendall 1903); Cambridge River, tributary of Umbagog Lake (Kendall & Goldsborough coll. 1905).

N. H.— Indian Stream, tributary of Connecticut River near Pittsburg, Coos County (Kendall & Goldsborough coll. 1904).

TELEOSTOMI. EVENTOGNATHI.

CYPRINIDAE.

56. Abramis crysoleucas (Mitchill).

Golden shiner; Roach; Bream.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 250; 1900, pt. 4, pl. 45, fig. 111.

Cyprinus crysoleucas Mitchill, Rept. fish. N. Y., 1814, p. 23. "New York."

Leucosomus americanus Girard. Storer, Mem. Amer. acad., 1855, vol. 5, p. 118, pl. 21, fig. 2.

Me.—Widely common. Eagle Lakes, Aroostook County; St. Croix and other waters Washington County; Penobscot Androscoggin; Kennebec, Presumpscot river waters (Kendall coll.).

N. H.—Umbagog Lake (Kendall & Goldsborough Coll. 1904).

Vt.—Lake Champlain (Thompson 1842).

Mass.—Fresh Pond, Cambridge (B. S. N. H., Van Vleck coll.); Rileys Pond, Waltham (B. S. N. H., Warren coll.); Quashnet River, Falmouth (Kendall coll. 1894); Wenham Lake (Goode & Bean 1879).

R. I.—"Narragansett Bay" (R. I. Fish Comm. 1899); Mashapaug and Benedict ponds (Pope coll. 1888–1896).

Conn.—"Common" (Linsley 1844).

57. Notropis bifrenatus (Cope).

Bridled minnow.

Jordan and Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 258. Kendall, Bull. U. S. fish comm., 1903, vol. 22, p. 361.

Hybopsis bifrenatus Cope, Trans. Amer. philos. soc., 1869, vol. 13, p. 384. "Schuylkill at Conshohocken [Pa.]."

Me.—Sebago and Little Sebago lakes (Kendall 1903); outlet Chaffin Pond, tributary to Sebago Lake (Kendall coll.).

Mass.—(Jordan & Evermann 1896).

TELEOSTOMI. EVENTOGNATHI.

CYPRINIDAE.

8. NOTROPIS MUSKOKA Meek.

Muskoka minnow.

Meek, Publ. 41, Field Columb. mus., Zoöl. ser., 1899, vol. 1, p. 308. "GULL LAKE, ONTARIO." Jordan & Evermann, Bull. 47, U. S. nat. mus., 1900, pt. 4, p. 3140.

ME.— Bill Fish Brook, tributary to Matagamon River (East Branch of Penobscot); Hay Brook tributary to Matagamon on Grand Lake Thoroughfare; Smith Brook, outlet of Haymock Lake, tributary of Eagle Lake of Allagash River; Cross Lake Thoroughfare, Eagle Lakes, Aroostook County (Kendall coll. 1901 and 1903); Matagamon waters (Smith 1902).

59. NOTROPIS BLENNIUS (Girard).

Straw-minnow.

Jordan & Evermann, Bull. 47, U. S. Nat. Mus., 1896, pt. 1, p. 261.

Alburnops blennius Girard, Proc. acad. nat. sci. Phil., 1856, p. 194, "ARKANSAS RIVER."

VT.— Lake Champlain, Swanton (Carter coll. 1907).

60. NOTROPIS HUDSONIUS (Clinton).

Spawneater; Shiner; Smelt.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 269; 1900, pt. 4, pl. 47, fig. 119.

Clupea hudsonia Clinton, Ann. lyc. nat. hist. N. Y., 1824, vol. 1, p. 49, pl. 2, fig. 2. "ALBANY, AND OTHER PLACES ON THE HUDSON RIVER [N. Y.]."

Hybopsis hudsonius Clinton. Cope, Trans. Amer. philos. soc., 1869, vol. 13, p. 386, pl. 12, fig. 3.

VT.— Lake Champlain (Evermann & Kendall 1894).

CYPRINIDAE.

61. NOTROPIS CORNUTUS (Mitchill).

Shiner; Redfin.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 281.

Cyprinus cornutus Mitchill, Amer. monthly mag. & crit. rev., 1817, vol. 1, p. 289. "WALLKILL RIVER [NEW YORK]."

Hypsolepis cornutus Girard. Storer, Mem. Amer. acad., 1855, vol. 5, p. 284, pl. 21, fig. 3.

ME.— Everywhere abundant. St. Johns, St. Croix and other waters in Washington County, Union, Penobscot, Kennebec, Androscoggin, Royals and Presumpscot river basins (Kendall coll.).

N. H.— Squam Lake (B. S. N. H., Storer coll.); Upper Connecticut River and Lakes (Kendall & Goldsborough coll. 1904); Upper Androscoggin River and Umbagog Lake (Kendall & Goldsborough coll. 1905).

VT.— Clyde and Passumpsic rivers (Evermann & Kendall 1894); Caspian Lake (Evermann & Kendall 1902).

MASS.— Berkshire Co. (Storer 1842, 1842, and 1844); Blanford, Hampden Co., (Olmsted 1843?); Fresh Pond, Cambridge (B. S. N. H., Van Vleck coll.); Wenham Lake; Merrimac River at Andover (Goode & Bean 1879); Quashnet River, Falmouth (Kendall coll. 1894).

R. I.— "Narragansett Bay" (R. I. Fish comm. 1899).

CONN.— "In several large streams" (Linsley 1844).

62. NOTROPIS ATHERINOIDES Rafinesque.

Silverside minnow.

Rafinesque, Amer. month. mag. and crit. rev., 1818, p. 204, "LAKE ERIE"; Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 293.

VT.— Lake Champlain, Swanton (Carter coll. 1907).

TELEOSTOMI. EVENTOGNATHI.

CYPRINIDAE.

63. NOTROPIS RUBRIFRONS (Cope).

Rednose minnow.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 295.

Alburnus rubrifrons Cope, Proc. acad. nat. sci. Phil., 1865, p. 85, "KISKIMINITAS RIVER."

Alburnellus rubrifrons Cope, Trans. Amer. Philos. soc., 1869, vol. 13, p. 388, pl. 8, fig. 3.

VT.— Lake Champlain, Swanton (Carter coll. 1907).

64. RHINICHTHYS CATARACTAE (Cuvier & Valenciennes).

Long-nose dace; Broad-nose minnow.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 306.

Gobio cataractae Cuv. & Val., Hist. nat. poissons, 1842, vol. 16, p. 315. "NIAGARA FALLS."

Argyreus nasutus Girard. Storer, Mem. Amer. acad., 1855, vol. 5, p. 289, pl. 22, fig. 1.

N. H.— Upper Connecticut River, its tributaries and Lakes (Kendall & Goldsborough 1904).

VT.— Sleeper River; Passumpsic River (Evermann & Kendall 1894).

MASS.— Blanford (Ayres 1843?); Nichols Brook (Storer 1855).

CONN.— West Hartford (Ayres 1843); Northford (Linsley 1843).

65. RHINICHTHYS ATRONASUS (Mitchill).

Black-nose dace; Brook minnow; Rock shiner, Potbelly.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 307.

Cyprinus atronasus Mitchill, Trans. lit. & philos. soc. N. Y., 1815, vol. 1, p. 460. Fresh water brooks inhabited by trout. "[WALLKILL RIVER, NEW YORK.]"

TELEOSTOMI. EVENTOGNATHI.

CYPRINIDAE.

Argyreus atronasus Heck. Storer, Mem. Amer. acad., 1855, vol. 5, p. 288, pl. 21, fig. 4.

ME.—Common everywhere especially, in brooks. Parmacheenee Lake (B. S. N. H., Snow & Whittier coll.); Sebago Lake (B. S. N. H., Putnam coll.); St. Johns, St. Croix, Union, Penobscot, Kennebec, Androscoggin, Royals & Presumpscot River basins (Kendall coll.).

N. H.—Upper Connecticut River and Lakes, and their tributaries (Kendall & Goldsborough 1904).

VT.—Streams flowing into Lake Champlain (Thompson 1842); Sleeper River; Passumpsic River; Lake Memphremagog (Evermann & Kendall 1894).

MASS.—Cohasset (B. S. N. H., Bryant coll.); Chicopee River (B. S. N. H., Wheatland coll.); Williamstown (B. S. N. H., Buck and Nason coll.); "Common in brooklets everywhere in Massachusetts (Goode & Bean 1879).

R. I.—"Narragansett Bay" (R. I. Fish comm. 1899).

CONN.—"Small running streams" (Linsley 1844).

66. COUESIUS PLUMBEUS (Agassiz).

Chub-minnow.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 323.

Gobio plumbeus Agassiz, Lake Superior, 1850, p. 366. "LAKE SUPERIOR * * * LAKE HURON."

Ceratichthys prosthemius Cope, Trans. Amer. philos. soc., 1869, vol. 13, p. 367, pl. 11, fig. 4.

ME.—Common almost everywhere. Metallic Brook, Richardson Lake (B. S. N. H., Putnam? coll. 1864); St. Johns; Penobscot, Kennebec, Androscoggin, Royals and Presumpscot River basins, and many other localities (Kendall coll.); Freeport (Kendall & Smith 1894).

TELEOSTOMI. EVENTOGNATHI.

CYPRINIDAE.

N. H.— Upper Connecticut River and Lakes, and their tributaries (Kendall & Goldsborough Coll. 1904).

Vt.— Clyde River at Newport (Evermann & Kendall 1894); Caspian Lake (Evermann & Kendall 1902).

67. Hybopsis kentuckiensis (Rafinesque).

Hornyhead; Jerker; Indian chub.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 322.

Luxilus kentuckiensis Rafinesque, Ichth. Ohioensis, 1820, p. 48. "Ohio River."

Ceratichthys biguttatus Kirtland. Cope, Trans. Amer. philos. soc., 1869, vol. 13, p. 366, pl. 11, fig. 5.

Mass.— Near Woods Hole (Smith 1898).

68. Exoglossum maxillingua (LeSueur).

Cutlip; Niggerchub.

Cope, Trans. Amer. philos. soc., 1869, vol. 13, p. 360, pl. 11, fig. 1. Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 327; 1900, pt. 4, pl. 54, fig. 140.

Cyprinus maxillingua LeSueur, Journ. acad. nat. sci. Phil., 1817, vol. 1, p. 85. "Pipe-Creek, Maryland."

Vt.— Lake Champlain (Evermann & Kendall 1894).

APODES.

ANGUILLIDAE.

69. Anguilla chrisypa Rafinesque.

Eel; Common eel.

Rafinesque, Amer. month. mag. & crit. rev., 1817, vol. 1, p. 120. "Lake George; Hudson River; Lake Champlain."

Anguilla bostoniensis DeKay. Storer, Mem. Amer. acad., 1863, vol. 8, p. 408, pl. 33, fig. 1.

TELEOSTOMI. APODES.

ANGUILLIDAE.

Anguilla chrysypa Rafinesque. Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 348; 1900, pt. 4, pl. 55, fig. 143.

Me.— Everywhere along the coast and in nearly all fresh waters. Eastport (B. S. N. H., Shurtleff coll.); St. Croix; Union, Eastport; Grand Lake Stream (Bean 1880); Penobscot, Kennebec, Androscoggin, Royals, and Presumpscot river basins; Eastport; Casco Bay (Kendall coll.).

N. H.— Butternut, Stocker, Eastmans, Miller, Angle, Island, Wash, Clarks, Messers, Pleasant, Suncook, Jenness, Little Bow, Harvey, Knowltons, Bagley, Long, Great, Bakers, Lime and Bartons ponds (N. H. Fish comm). Connecticut Lakes (Kendall & Goldsborough coll. 1904).

Vt.— Lake Champlain; Connecticut River; outlet of Barnards Pond (Thompson 1842).

Mass.— Boston; Boston Bay (LeSueur 1817); Medford; Watertown (Storer 1839); Holmes Hole (Storer 1863); Woods Hole (Bean 1880); Waquoit (Lyman 1872); Woods Hole (Baird 1873); Malden (B. S. N. H., Sandborn coll.); Wellesley (B. S. N. H., Denton coll.); Mystic River (B. S. N. H., Van Vleck coll.); Annisquam (B. S. N. H.); Quashnet River, Falmouth (Kendall coll. 1894); Woods Hole; Buzzards Bay (Smith 1898); Nantucket (Sharp & Fowler 1904).

R. I.— Newport (LeSueur 1817); Narragansett Bay (R. I. Fish comm. 1899); Mashapaug and Fenners ponds; Pocassett River; Conimicut (Pope coll. 1894–1896) Greenwich Bay (Tracy 1906).

Conn.— Hartford; Northford (Linsley 1844); Noank (B. S. N. H., Hyatt & Rathbun coll.).

LEPTOCEPHALIDAE.

70. Leptocephalus conger (Linné).

Conger eel; Sea eel.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 354; 1900, pt. 4, pl. 57, fig. 148.

TELEOSTOMI. APODES.

LEPTOCEPHALIDAE.

Muraena conger Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 245. "OCEANO EUROPAEO."

Leptocephalus gracilis Storer, Proc. Bost. soc. nat. hist., p. 76, 1845, vol. 2. Mem. Amer. acad., 1867, vol. 9, p. 256. [Young.]

ME.— Cherryfield (Storer 1845, 1846, and Wheatland 1852); Old Orchard (Norton coll. 1906).

MASS.— Nomans Land (Storer 1839); Nahant (Storer 1867 and B. S. N. H., Cook coll. 1858); North Truro (Kendall coll. 1896); Falmouth; Woods Hole (Baird 1873 and Smith 1898).

R. I.— Near Block Island (Mitchill 1818); Narragansett Bay (R. I. Fish comm. 1899).

MURAENIDAE.

71. MURAENA RETIFERA Goode & Bean.

Goode & Bean, Proc. U. S. nat. mus., 1882, vol. 5, 435. "CHARLESTON, S. C." Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 401; 1900, pt. 4, pl. 65, fig. 173.

MASS.— Tuckernuck Island (Smith 1900).

ISOSPONDYLI.

ELOPIDAE.

72. TARPON ATLANTICUS (Cuvier & Valenciennes).

Tarpon.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 409; 1900, pt. 4, pl. 67, fig. 177.

Megalops atlanticus Cuv. & Val., Hist. nat. poissons, 1846, vol. 19, p. 398. "GUADALOUPE."

MASS.— South Dartmouth; Quisset; Menemsha (Smith 1898); Marthas Vineyard; Woods Hole (Sherwood & Edwards 1901).

ELOPIDAE.

R. I.—Newport (Goode 1879); Narragansett Bay; Dutch Island Harbor (Sherwood & Edwards, 1901).

73. ELOPS SAURUS Linné.

Ladyfish; Tenpounder.

Linné, Syst. nat. ed. 12, 1766, vol. 1, p. 518. "CAROLINA." Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 410; 1900, pt. 4, pl. 67, fig. 178.

MASS.—Woods Hole (Baird 1873); New Bedford; Woods Hole (Bean 1880); Vineyard Sound; Buzzards Bay (Smith 1898); Nantucket (Sharp and Fowler 1904).

R. I.—Narragansett Bay (R. I. Fish Comm. 1899).

ALBULIDAE.

74. ALBULA VULPES (Linné).

Bonefish.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 411; 1900, pt. 4, pl. 68, fig. 179.

Esox vulpes Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 313. "AMERICA."

MASS.—Woods Hole (Baird 1873 and Smith 1898).

R. I.—Newport (Bean 1880, Tracy 1906).

HIODONTIDAE.

75. HIODON TERGISUS LeSueur.

Mooneye.

LeSueur, Journ. acad. nat. sci. Phil., 1818, vol. 1, p. 364. "Lake Erie at Buffalo." Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 413; 1900, pt. 4, pl. 68, fig. 180.

VT.—Lake Champlain (Thompson 1842).

TELEOSTOMI. ISOSPONDYLI.

CLUPEIDAE.

76. ETRUMEUS TERES (DeKay).

Round herring.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 420.

Alosa teres DeKay, N. Y. fauna, 1842, pt. 4, p. 262, pl. 40, fig. 128. "HARBOR OF NEW YORK."

MASS.— Woods Hole (Bean 1880); Menemsha Bight (Smith 1898).

R. I.— Newport (Goode 1879 and Tracy 1906).

77. CLUPEA HARENGUS Linné.

Herring; Labrador herring; English herring; Englishman; Sperling (young).

Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 317. "M. EUROPAEIS." Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 421; 1900, pt. 4, pl. 62, fig. 185.

Clupea elongata LeSueur. Storer, Mem. Amer. acad., 1858, vol. 6, p. 330, pl. 26, fig. 1.

ME.— Along our coast especially at Herring Gut (Williamson 1832); all along the coast, especially Passamaquoddy Bay and vicinity. (Moore 1897); Eastport (Verrill 1871; U. S. nat. mus. 1872; Bean 1880; Kendall coll. 1893); Bucksport (U. S. nat. mus. 1878); Casco Bay (Bean 1880; Lee 1885; Kendall coll.).

N. H.— ([Peck] Belknap 1792).

MASS.— Falmouth; Duxbury; Marthas Vineyard (Storer 1839); Edgartown; Massachusetts Bay; Provincetown Harbor (Storer 1859); Ipswich Bay (Bean 1880); Menemsha Bight; Monomoy; North Truro (Kendall coll. 1896); Woods Hole (Baird 1873; Bean 1880 and Smith 1898); Nantucket (Sharp & Fowler 1904).

R. I.— Narragansett Bay (R. I. Fish comm., 1899); Conimicut (Pope coll. 1894–97).

CONN.— Stratford (Linsley 1844).

CLUPEIDAE.

78. CLUPANODON PSEUDOHISPANICUS (Poey).

Spanish sardine.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 423.

Sardinia pseudohispanica Poey, Memorias, 1860, vol. 2, p. 311. "CUBA."

Clupea pseudohispanica (Poey). Kendall & Smith, Bull. U. S. fish comm., 1894, vol. 14, p. 17.

MASS.— Woods Hole; Menemsha Bight (Kendall & Smith 1894; and Smith 1898).

79. POMOLOBUS MEDIOCRIS (Mitchill).

Hickory shad; Hickory jack; Fresh water tailor; Fall herring.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 425; 1900, pt. 4, pl. 71, fig. 188.

Clupea mediocris Mitchill, Rept. fish. N. Y., 1814, p. 20. "That part of the bay of New York which borders on Staten Island."

Alosa lineata Storer. Storer, Mem. Amer. acad., 1858, vol. 6, p. 340, pl. 27, fig. 2.

ME.— "Mouths of Kenduskeag and other fresh rivers (Williamson (1832); Maine coast (Goode 1884); Small point, Casco Bay (Kendall coll. 1896); Freeport (Kendall coll. 1900).

MASS.— Provincetown (Storer 1847 and 1859); Waquoit (Lyman 1872); Boston Harbor (B. S. N. H., Wheildon coll.); New Bedford; Woods Hole (Bean 1880); North Truro; Monomoy; Menemsha Bight (Kendall coll. 1896); Woods Hole (Baird 1873 and Smith 1898) Tarpaulin Cove (Smith 1898).

R. I.— Narragansett Bay (R. I. Fish comm. 1899).

CONN.— Stratford; New Haven; Housatonic and Connecticut rivers (Linsley 1844).

TELEOSTOMI. ISOSPONDYLI.

CLUPEIDAE.

80. Pomolobus pseudoharengus (Wilson).

Alewife; Elwife; Gaspereau; Sawbelly; Kyak.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 426; 1900, pt. 4, pl. 71, fig. 189.

Clupea pseudoharengus Wilson, Ree's cyclopedia, 1811?, vol. 9, p. —.

Alosa cyanonoton Storer. Storer, Mem. Amer. acad., 1858, vol. 6, p. 339, pl. 27, fig. 1.

Me.— Common all along the coast, entering all accessible streams. Eastern, Kennebec, Sandy, East Branch of Penobscot (Me. Fish comm. 1867); Eastport U. S. Nat. Mus. 1872; (Kendall coll. 1893); Sebasticook, Sandy, East Branch of Penobscot, Dennys, Pennamaquan, Damariscotta, East Machias, Chandlers, Wescongus, Harrington, Tunk, St. Georges, Androscoggin, Saco, Mousam and Piscataqua rivers; Patten Stream; West Gouldsborough, Mt. Desert and Casco Bay (Atkins 1887); Casco Bay (Kendall coll.); western tributaries of St. John and St. Croix River (Rathbun & Wakeham 1897).

N. H.— Cobbetts Pond [land locked] (N. Wentworth coll.).

Mass.— Watertown, Taunton, Medford, pond in Manchester and Chester; Merrimac River; Mystic River (Storer 1859); Waquoit (Lyman 1872); Melrose (B. S. N. H., Van Vleck coll.); Cohasset Narrows (Bean 1880); North Truro; Monomoy (Kendall coll. 1896); Woods Hole (Smith 1898); Nantucket (Sharp and Fowler 1904).

R. I.— Narragansett Bay (R. I. Fish comm. 1899; Taunton River (Tracy 1906).

Conn.— "Common" (Linsley 1844); Noank (Bean 1880).

78. Pomolobus aestivalis (Mitchill).

Glut herring; Summer herring; Blueback; Blackbelly; Kyack.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 426; 1900, pt. 4, pl. 71, fig. 190.

CLUPEIDAE.

? *Clupea aestivalis* Mitchill, Rept. fish. N. Y., 1814, p. 21. "NEW YORK."

Alosa tyrannus DeKay. Storer, Mem. Amer. acad., 1858, vol. 6, p. 334 [in part], pl. 26, fig. 3.

ME.— Eastport (U. S. nat. mus. 1872; Kendall coll. 1893); Dennys River (Kendall 1894; Casco Bay (Lee 1885; Kendall coll.); Lower Penobscot River (Kendall coll. 1902).

N. H.—

MASS.—Sandwich (Storer 1839); Provincetown (Storer 1847 and 1858); Waquoit (Lyman 1872); Monomoy (Kendall coll. 1896); Woods Hole (Bean 1880 and Smith 1898).

82. ALOSA SAPIDISSIMA (Wilson).

Shad.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 427; 1900, pt. 4, pl. 72, fig. 191.

Clupea sapidissima Wilson, Ree's cyclopedia, 1811?, vol. 9, p.—

Alosa praestabilis DeKay. Storer, Mem. Amer. acad., 1858, vol. 6, p. 332, pl. 26, fig. 2.

ME.— In all our rivers until stopped by dams (Williamson 1832); Kennebec; Merry Meeting Bay; Cathance tributary of Kennebec; Sebasticook, Sandy, Penobscot, West Branch, Eastern rivers (Me. fish comm. 1867); Eastport (U. S. nat. mus., 1872; Kendall coll. 1893); Orland River (Merrill coll. 1899); off the coast (Kendall coll. 1895); Casco Bay (U. S. nat. mus. 1873; Bean 1880; Kendall coll.), St. Croix (Rathbun and Wakeham 1899). Kennebec; Penobscot; St. Croix; East Machias; Wescongus; Harrington; Mousam; Piscataqua rivers (Atkins 1887).

N. H.— Merrimac River (Thompson 1842);

VT.— Connecticut River at Bellows Falls (Thompson 1842).

MASS.—Charles, Merrimac and Concord rivers (Storer 1839 and 1859); Massachusetts Bay (B. S. N. H., Storer coll.); West Yar-

mouth (Lyman 1861); Waquoit (Lyman 1872); Salem Harbor (Goode & Bean 1879); New Bedford (Bean 1880); Menemsha Bight (Kendall coll. 1896); Woods Hole (Baird 1873 and Smith 1898); Nantucket (Sharp & Fowler 1904).

R. I.— Narragansett Bay (R. I. Fish comm. 1899); Rumstick Point; Dutch Island Harbor; Taunton River (Tracy 1906).

Conn.— "Common" (Linsley 1844); Noank (Bean 1880).

83. Opisthonema oglinum (Le Sueur).

Thread herring.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 432.

Megalops oglina LeSueur, Journ. acad. nat. sci. Phil., 1817, vol. 1, p. 359. "Newport, R. I."

Chatoesus signifer DeKay, N. Y. fauna, 1842, pt. 4, p. 264, pl. 41.

Mass.— Buzzards Bay; Vineyard Sound (Smith 1898).

R. I.— Newport (LeSueur 1817); Narragansett Bay (R. I. Fish comm. 1899).

84 Brevoortia tyrannus (Latrobe).

Menhaden; Pogy.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 433; 1900, pt. 4, pl. 73, fig. 195.

Clupea tyrannus Latrobe, Trans. Amer. philos. soc., 1802, vol. 5, p. 77, pl. 1. "Chesapeake Bay."

Alosa menhaden Storer. Storer, Mem. Amer. acad., 1858, vol. 6, p. 336, pl. 26, fig. 4.

Me.— "On our coast and up rivers as far as fresh and saltwater mix" (Williamson 1832); Mouth Penobscot River (B. S. N. H., Storer coll.); Passamaquoddy Bay; Castine; Belfast; Brookline; Cranberry Isles; Sargentville; Matinicus; New Haven; Monhegan; Damariscotta; Pemaquid; Wescongus; Booth Bay; Bristol; Round

CLUPEIDAE.

pond; Waldoboro; Pond Island; Portland; Pine Point (Goode 1877); Casco Bay (Lee 1885; Kendall coll.; Smith 1902).

N. H.—

MASS.— Massachusetts Bay; Provincetown; Lynn; Sandwich (Storer 1859); Boston Bay (B. S. N. H., Cutting coll.); Salem (B. S. N. H., Brown coll.); Waquoit (Lyman 1872); Danvers (Goode & Bean 1879); North Truro; Monomoy; Menemsha Bight (Kendall coll. 1896); Woods Hole (Baird 1873; Bean 1880 and Smith 1898); Nantucket (Sharp & Fowler 1904).

R. I.— Narragansett Bay (R. I. Fish comm., 1899); Conimicut (Pope coll. 1894–97).

CONN.— Long Island Sound (Linsley 1844); Noank (Bean 1880); Saybrook (Kendall coll. 1890).

ENGRAULIDIDAE.

85. ANCHOVIA BROWNII (Gmelin).

Striped anchovy.

Atherina brownii Gmelin, Syst. nat., 1788, vol. 1, p. 1397. "JAMAICA."

Stolephorus brownii Gmelin. Jordan & Evermann, Bull. 47, U. S. nat. mus, 1896, pt. 1, p. 443.

MASS.— Woods Hole (Baird 1873 [?]; Bean 1880 and Smith 1898).

R. I.— Narragansett Bay (R. I. Fish Comm. 1899).

86. ANCHOVIA ARGYROPHANUS (Cuvier & Valenciennes).

Silvery anchovy.

Engraulis argyrophanus Cuv. & Val., Hist. nat. poissons, 1848, vol. 21, p. 49. "EQUATORIAL ATLANTIC."

Stolephorus argyrophanus Cuv. & Val. Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 444.

MASS.— Woods Hole (Smith 1898).

TELEOSTOMI. ISOSPONDYLI.

ENGRAULIDIDAE.

87. ANCHOVIA MITCHILLI (Cuvier & Valenciennes).

Whitebait.

Engraulis mitchilli Cuv. & Val., Hist. nat. poiss., 1848, vol. 21, p. 50. "NEW YORK; CAROLINA; LAKE PONTCHATRAIN."

Engraulis vittata Baird & Girard. Storer, Mem. Amer. acad., 1858, vol. 6, p. 341 [?], pl. 27, fig. 3.

Stolephorus mitchilli (Cuvier & Valenciennes). Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 446.

ME.— Casco Bay (Kendall coll. 1907).

MASS.— Provincetown (Storer 1859); Woods Hole (Smith 1898).

R. I.— (Tracy 1906).

SALMONIDAE.

88. COREGONUS QUADRILATERALIS Richardson.

Round whitefish; Menominee; Frostfish; Chiven; Billfish; Shadwaiter.

Richardson, Franklin journ., 1823, p. 714, pl. 25, fig. 2. "FORT ENTERPRISE, BRITISH AMERICA." Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 465. Kendall, Bull. U. S. fish. comm., 1903, vol. 22, p. 365, fig.

ME.— Moosehead Lake (B. S. N. H., Davidson coll.); Clearwater pond, Industry; Umsaskis of Allagash River; Cross Lake and Square Lake of Eagle Lakes, Aroostook County (Kendall 1903); Debsconeag Lakes, Piscataquis County (Kendall coll.).

N. H.— Lake Winnepesaukee (Prescott 1851); First Connecticut Lake (N. H. Fish comm. 1892).

VT.— Lake Champlain?; Lake Memphremagog (Evermann & Kendall 1894).

89. COREGONUS CLUPEIFORMIS (Mitchill).

Whitefish.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 465; 1900, pt. 4, pl. 76, fig. 202.

TELEOSTOMI. ISOSPONDYLI.

SALMONIDAE.

Salmo clupeiformis Mitchill, Amer. monthly mag. & crit. rev., 1818, vol. 2, p. 321. "SAULT STE MARIE."

VT.— (Storer 1842); Lake Champlain (Thompson 1842; 1853 and Evermann & Kendall 1894).

90. COREGONUS LABRADORICUS Richardson.

Whitefish; Pound-fish; Shadwaiter; Shad; Gizzard-fish.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 466; Kendall, Bull. U. S. fish comm., 1903, vol. 22, p. 363, fig.

Salmo (*Coregonus*) *labradoricus* Richardson, Fauna Bor. Amer., 1836, vol. 3, p. 206. "MUSQUA RIVER, [LABRADOR]."

ME.— Waters of the East and West branches of the St. Croix River; Moosehead Lake; Debsconeag Lakes; lakes of the Allagash; St. Frances and Fish rivers (Kendall 1903).

N. H.— Lake Winnepesaukee (Prescott 1851).

VT.— Lake Champlain; Lake Memphremagog (Evermann & Kendall 1894).

91. COREGONUS STANLEYI Kendall.

Little whitefish; Stanleys whitefish.

Kendall, Bull. U. S. fish. comm., 1903, vol. 22, p. 366, fig. "MAINE."

ME.— Eagle Lakes, Aroostook County (Kendall 1903).

92. ARGYROSOMUS ARTEDI (LeSueur).

Cisco; Lake herring.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896 pt. 1, p. 468. Evermann & Smith, Rept. U. S. fish. comm. for 1894, 1896, p. 30, pl. 21.

Coregonus artedi LeSueur, Journ. acad. nat. sci. Phil., 1818, vol. 1, p. 231. "LAKE ERIE; NIAGARA RIVER."

TELEOSTOMI. ISOSPONDYLI.

SALMONIDAE.

VT.— Lake Champlain (Thompson 1842); Lake Bomoseen, Rutland County; Vergennes (Evermann & Kendall 1894).

93. SALMO SALAR Linné.

Salmon; Sea salmon.

Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 308. "IN OCEANO EUROPAE." Storer, Mem. Amer. acad., 1858, vol. 6, p. 320, pl. 25, fig. 2. Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 486.

ME.— Kennebec River (Mitchill 1818); Affluent of Union River (Girard 1854); notably in the Penobscot; St. Croix, Dennys rivers; Penobscot Bay and neighboring coastal waters; Casco Bay (Kendall coll.).

N. H.— All along Merrimac River as far up as Woodstock dam (N. H. Fish. comm., 1878); Amoskeag Falls (N. H. Fish. comm., 1880; Merrimac River (N. H. Fish Comm. 1890).

VT.— Lake Champlain; Connecticut River, formerly (Thompson 1842).

MASS.— Merrimac River (Storer 1839, 1859 and Agassiz 1859); Woods Hole (Baird 1873); Lawrence (N. H. Fish comm. 1878, 1879, 1880, 1883); Massachusetts rivers (Goode & Bean 1879); North Truro (Kendall coll. 1896); Buzzards Bay; Vineyard Sound (Smith 1898); off Tuckernuck, Nantucket (Sharp & Fowler 1904).

R. I.— Narragansett Bay (R. I. Fish Comm., 1899); Sakonnet River (Tracy 1906).

CONN.— Connecticut River (Linsley 1844).

94. SALMO SEBAGO Girard.

Landlocked Salmon; Fresh-water salmon; Blackspot trout; Salmon trout.

Girard, Proc. acad. nat. sci. Phil., 1853, p. 380. "SOUTHERN MAINE."

TELEOSTOMI. ISOSPONDYLI.

SALMONIDAE.

Salmo salar sebago Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 487.

Me.— Originally in St. Croix Lakes, Grand Lake and Grand Lake Stream; Green Lake (Reeds Pond) in Union River basin; Sebec Lake, Penobscot basin; Sebago Lake, Presumpscot basin; now widely distributed by fish cultural operations. "Sebago pond"? (Storer 1839); (Girard 1853).

95. Cristivomer namaycush Walbaum.

Great Lakes trout; Mackinaw trout; Namaycush; Lunge; Togue; Laker; Lake trout.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 504; 1900, pt. 4, pl. 82, fig. 217.

Salmo namaycush Walbaum, Artedi Pisc., 1792, p. 68. "Hudson Bay."

Me.— Most deep lakes in eastern and northern Maine. Thompson Pond in Poland; Tunk Lakes in Hancock county; Lakes of the Upper Kennebec, Penobscot and St. Johns rivers and the St. Croix system, Wilton Pond (Me. Fish comm. 1867); Moosehead Lake (Goode 1879 and B. S. N. H., Davidson coll.); Hurd pond; Matagamon Lake; Webster, Telos, Chamberlain, Eagle, Churchill, Beau, Glasier lakes; Eagle Lakes, Aroostook County, Moosehead Lake (Kendall coll. 1901 and 1902).

N. H.— Winnepesaukee Lake; Squam Lake; East Pond in Enfield; Newfound Lake and First and Second Connecticut lakes (N. H. Fish comm. 1892); First and Second Connecticut lakes (Kendall & Goldsborough coll. 1904).

Vt.— Lake Champlain; ponds in Orleans County; Bellwater pond in Barton and several ponds in Glover and Charleston (Thompson 1842); Lake Champlain; Lake Memphremagog; Caspian Lake; Dunmore; Willoughby; Maidstone (Evermann & Kendall 1894).

TELEOSTOMI. ISOSPONDYLI.

SALMONIDAE.

96. SALVELINUS FONTINALIS (Mitchill).

Trout; Brook trout; Red spot; Squaretail.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 506; 1900, pt. 4, pl. 82, fig. 218.

Salmo fontinalis Mitchill, Rept. fish. N. Y., 1814, p. 12. "NEW YORK." Storer, Mem. Amer. acad., 1858, vol. 6, p. 322, pl. 25, fig. 3.

ME.— Almost everywhere in brooks, rivers, ponds and lakes. Moosehead Lake (B. S. N. H., Hamlin coll., Davidson coll.); Belgrade Lake (B. S. N. H.).

N. H.— Pond, Monadnock Mt. (Bigelow 1849); Enfield (Storer 1859); Beaver Meadow, Fords, Mountain, Clarksville, Monadnock, Converse, Clarks, Morrills, Little, Squam, Safety, Bog, Big Dummer, Little Dummer, Garlands, Connor, Bean, Dan Hole, Pierce, Stinsons, Baptist, Trout, Boulster, Chapmans, Picket Hill, Gilman, Bear and Rocky Ponds (N. H. Fish comm.); Connecticut Lakes and vicinity (Kendall & Goldsborough coll. 1904); Umbagog Lake, Molnichwock Pond and Brook, Androscoggin River (Kendall & Goldsborough coll. 1905).

VT.— Sleeper River; tributaries of Memphremagog, Caspian Lake (Evermann & Kendall 1894 and 1898).

MASS.— Sandwich (Forsyth 1846; Storer 1839 and 1859); Waltham (B. S. N. H., Warren coll.); Quashnet River, Falmouth (Kendall coll. 1894); Woods Hole (Smith 1898).

R. I.— Narragansett Bay (R. I. Fish Comm. 1899); small streams in Foster, Scituate and Gloucester (Pope coll.).

CONN.— Housatonic (Linsley 1844); "Many Streams" (Ayres 1844).

97. SALVELINUS AGASSIZII (Garman).

Dublin Pond trout.

Salmo agassizii Garman, 19th rept. Mass. fish. comm., 1885, p. 20, fig. 17, 18. "DUBLIN POND (LAKE MONADNOCK) N. H."

TELEOSTOMI. ISOSPONDYLI.

SALMONIDAE.

Salvelinus fontinalis agassizi (Garman). Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 507.

N. H.— Monadnock Lake; Center Pond (Garman 1885; and N. H. fish comm.).

98. SALVELINUS AUREOLUS Bean.

Golden trout; White trout; Silver trout.

Bean, Proc. U. S. nat. mus., 1887, vol. 10, p. 628. "SUNAPEE LAKE, N. H."

Salvelinus alpinus aureolus (Bean). Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 511; 1900, pt. 4, pl. 83, fig. 220.

ME.— Floods Pond, Otis, Hancock County (Kendall coll. 1903).

N. H.— Sunapee Lake (Bean 1887 and 1889); Danhole Pond (N. H. fish comm. 1890; Jordan & Evermann 1896).

VT.— Averill Ponds (Wentworth coll.).

99. SALVELINUS OQUASSA (Girard).

Blueback trout; Blueback.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 514 1900, pt. 4, pl. 83, fig. 221.

Salmo oquassa Girard, Proc. Bost. soc. nat. hist., 1853, vol. 4, p. 262. "MOOSEMEGANTIC LAKE * * * KENEBAGO."

ME.— Mooslucmaguntic and Oquassa lakes, Kennebago Stream (Girard 1853); Rangeley and Mooselucmaguntic (Me. fish comm., 1867); Kennebago Stream (Kendall coll. 1900); Rangeley Stream (Kendall coll. 1903 and 1904); Rainbow Lake, Piscataquis County (Garland 1903 and 1904).

TELEOSTOMI. ISOSPONDYLI.

ARGENTINIDAE.

100. OSMERUS MORDAX (Mitchill).

Smelt.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 523; 1900, pt. 4, pl. 86, fig. 228.

Atherina mordax Mitchill, Rept. fish. N. Y., 1814, p. 15, "NEW YORK."

Osmerus viridescens LeSueur. Storer, Mem. Amer. acad., 1858, vol. 6, p. 327, pl. 25, fig. 4.

ME.— Common along the whole coast. St. Croix and other Washington County Waters; Eastport; Union, Penobscot; Kennebec; Androscoggin, Presumpscot river basins, Rockland; Casco Bay (Kendall coll.); Sabattis Pond [?] (Merrill coll.); Green Lake [?] (Race coll.); Craigs Brook Craigs and Toddy ponds [?] (Atkins coll.).

N. H.—Squam and Winnepesaukee lakes (H. R. Storer 1857 and N. H. fish comm. 1870); Stocker, Long, Sandy and Smith Ponds (N. H. fish comm.).

VT.—Lake Champlain and Lake Memphremagog (Evermann & Kendall 1894).

MASS.— Jamaica Pond (H. R. Storer 1857); Watertown; Milton River (Storer 1839 and 1859); Annisquam (B. S. N. H.); Woods Hole (Baird 1873; Bean 1880 and Smith 1898).

R. I.— Narragansett Bay (R. I. fish comm. 1899); Narrow River (Tracy 1906).

CONN.— Stratford (Linsley 1844); Noank (Bean 1880).

101. OSMERUS SPECTRUM Cope.

Wilton Pond smelt.

Cope, Proc. Amer. philos. soc., 1870, vol. 11, p. 490. "WILTON POND, KENNEBEC COUNTY, MAINE."

TELEOSTOMI. ISOSPONDYLI.

ARGENTINIDAE.

Osmerus mordax spectrum (Cope). Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 523.

ME.—"Wilton Pond" (Cope 1870); Wilson Pond (Stanley coll. 1904).

102. OSMERUS ABBOTTII Cope.

Cobbosseecontee smelt.

Cope, Proc. Amer. philos. soc., 1870, vol. 11, p. 490. "COBBOSSEECONTIC LAKE."

Osmerus mordax abbottii (Cope). Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 524.

ME.— Cobbosseecontee Lake (Cope 1870; Stanley & Berry coll.).

103. ARGENTINA SILUS Ascanius.

Herring smelt.

Ascanius, Icon. rev. nat., 1763, fasc. 3, p. 3, pl. 24. "NORWAY." Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 526.

ME.— Belfast; Biddeford pool (Goode & Bean 1880).

INIOMI.

SYNODONTIDAE.

104. TRACHINOCEPHALUS MYOPS Forster).

Ground spearing.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 533; 1900, pt. 4, pl. 88, fig. 235.

Salmo myops Forster, Bloch & Schneider, Syst. ichth., 1801, p. 421. "ST. HELENA."

MASS.— Woods Hole (Smith 1898).

TELEOSTOMI. INIOMI.

SYNODONTIDAE.

105. SYNODUS FOETENS (Linné).

Lizzardfish.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 538; 1900, pt. 4, pl. 88, fig. 236.

Salmo foetens Linné, Syst. nat. ed. 12, 1766, vol. 1, p. 513. "CAROLINA."

MASS.— Woods Hole (Smith 1898).

R. I.— Narragansett Bay (R. I. fish comm., 1899).

MAUROLICIDAE.

106. MAUROLICUS PENNANTI (Walbaum).

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, vol. 1, p. 577.

Argentina pennanti Walbaum, Artedi Pisc., 1792, p. 47. "ENGLAND."

Scopelus humboldtii Cuv. Storer, Mem. Amer. acad., 1858, vol. 6, p. 328, pl. 25, fig. 5.

Maurolicus borealis Goode & Bean, Oceanic ichth., 1896, p. 96, pl. 30, fig. 111.

MASS.— Nahant (Storer 1839); Provincetown (Storer 1859); Woods Hole (Smith 1898).

HAPLOMI.

UMBRIDAE.

107. UMBRA LIMI (Kirtland).

Mud minnow; Mud fish.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 623.

Hydrargyra limi Kirtland, Boston journ. nat. hist., 1841, vol. 3, p. 277, pl. 2, fig. 4. "NORTHERN OHIO."

Hydrargia atricada [!] DeKay, N. Y. fauna, 1842, pt. 4, p. 220.

UMBRIDAE.

VT.— Lake Champlain and tributaries (Thompson 1842); "Vermont" (DeKay 1842).

108. UMBRA PYGMAEA (DeKay).

Mud minnow.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 624; 1900, pt. 4, pl. 99, fig. 268.

Leuciscus pygmaea DeKay, N. Y. fauna, 1842, pt. 4, p. 214, pl. 42, fig. 13. "TAPPAN, ROCKLAND COUNTY, N. Y."

CONN.— [?]

ESOCIDAE.

109. ESOX AMERICANUS (Gmelin).

Banded pickerel; short-nose pickerel; Trout-nose pickerel.

Esox lucius β americanus Gmelin, Syst. nat. 1788, vol. 1, p. 1319. "LONG ISLAND, N. Y."

Esox fasciatus DeKay, N. Y. fauna, 1842, pt. 4, p. 224, pl. 34, fig. 110.

Esox ornatus Girard. Storer, Mem. Amer. acad., 1858, vol. 6, p. 313, pl. 24, fig. 2.

Lucius americanus (Gmelin). Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 126.

VT.— Lake Bomosen (Ripley coll. 1905).

MASS.— Sherburne (Storer 1843); Charles River at Framingham (Girard 1854); Concord River (Thoreau 1859, Putnam 1859); Charles River at Wayland (Sprague 1859); East Lexington (B. S. N. H., Sprague coll.); Andover (B. S. N. H., Sanborn coll.); Fresh Pond, Cambridge (B. S. N. H., Van Vleck coll.); Wellesley (B. S. N. H., Denton coll.); Wenham Lake (Goode & Bean 1879).

R. I.— "Narragansett Bay" (R. I. fish comm. 1899).

CONN.— Samp-Mortar River, Fairfield (Linsley 1844).

TELEOSTOMI. HAPLOMI.

ESOCIDAE.

110. Esox reticulatus LeSueur.

Pickerel; Grass pike; Jack.

LeSueur, Journ. acad. nat. sci. Phil., 1818, vol. 1, p. 414; "Connecticut River, Adams, Mass." Storer, Mem. Amer. acad., 1858, vol. 6, p. 311, pl. 24, fig. 1.

Lucius reticulatus (LeSueur). Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 627.

Me.— Now widely distributed especially in the southern half of the state. Sebago Lake and outlet (B. S. N. H., Putnam coll.); St. Croix and other Washington County waters (Kendall 1894); Union, Penobscot, Kennebec, Androscoggin, Royals and Presumpscot River basins (Kendall coll.).

N. H.— Winnipesaukee Lake (B. S. N. H., Davidson coll.); Butternut, Stocker, Eastmans, Miller, Spectacle, Angle, Island, Wash, Long, Goves, Whittaker, Upper, Cranney, Middle, Pleasant, Grassy, Clarks, Camp Swamp, Little, Squam, White-Oak, Flints, Pennichuck, Rocky, Larkins, Hinmans, Sawyers, Clay, Smiths, Clements, Rolfs, Carrs, Little Massabesic, Otternick, Cherry, Great, Country, Halfmoon, Streeter, Perch, Mink, Young, Henry, Cloughs, Crooked, Hothole, Spaldings, Cedar, Berry, Round, Pratts, Messers, Otter, Little Sunapee, Suncook, Jenness, Little Bow, Harvey, Knowltons, Duncan, Gumpars, Whites, Cunningham, Pierce, Jones, Governors, Peckus, Cass, Sandy Stinsons, Loon, Captains, Policy, Worlds End, Hunkins, Station, Star, Bow, Bolster, Gilman, Lovewells, Province, Pine River, Great East, Bagleys, Bear, Jones, Day, Bakers, Line, Cabots, Smiths, Rusts, Beach & Sargents Ponds (N. H. fish comm.).

Vt.— Connecticut River and most of its larger tributaries (Thompson 1842); Lake Champlain; Connecticut River (Evermann & Kendall 1894).

Mass.— Connecticut River, Adams (LeSueur 1818); Brewster, Cape Cod (Storer 1839 and 1859); near Greenfield (Ayres 1843);

ESOCIDAE.

Charles River (Sprague 1855); Menham (B. S. N. H., Brown coll.); East Gloucester (B. S. N. H., Davidson coll.); Quashnet River, Falmouth (Kendall coll. 1894).

R. I.— Pocassett River, Ponegansett Reservoir, Georgiaville (Pope coll. 1895).

CONN.— Hockanum River, about 2 miles east of Hartford (Ayres 1843); Hartford (Linsley 1844).

111. ESOX LUCIUS Linné.

Pike; Pickerel.

Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 314. "EUROPA."

Lucius lucius (Linné). Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 628; 1900, pt. 4, pl. 100, fig. 269.

VT.— Dunmore Lake, Salisbury (B. S. N. H.); Lake Champlain and Lake Memphremagog (Evermann & Kendall 1894); Lake Bomosen (Ripley coll. 1905).

112. ESOX MASQUINONGY Mitchill.

Muskalonge.

Mitchill, Mirror, 1824, p. 297. "LAKE ERIE." Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 629; 1900, pt. 4, pl. 100, fig. 270.

VT.— Lamoille River (Thompson 1850 and 1853); Lake Champlain (Evermann & Kendall 1894)

POECILIIDAE.

113. FUNDULUS MAJALIS (Walbaum).

Killifish; Mayfish; Bass killy; Yellowtail.

Garman, Mem. mus. comp. zoöl., 1895, vol. 19, p. 104, pl. 2, fig. 5–6; pl. 9, fig. 1–8. Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 639; 1900, pt. 4, pl. 101, fig. 271.

TELEOSTOMI. HAPLOMI.

POECILIIDAE.

Cobitis majalis Walbaum, Artedi Pisc., 1792, p. 12. "LONG ISLAND."

Hydargyra flavula Val. Storer, Mem. Amer. acad., 1858, vol. 6, p. 309, pl. 23, fig. 5, 6.

MASS.— Holmes Hole; near Boston (Storer 1842 and 1859); Salem (Wheatland 1859); West Yarmouth (Lyman 1861); Waquoit (Lyman 1872); South Mill Pond [?] (Goode & Bean 1879); Woods Hole (Baird 1873; Bean 1880 and Smith 1898); Nantucket (Sharp & Fowler 1904).

R. I.— Conimicut (Pope coll. 1894–97).

CONN.— Noank (Goode 1879).

114. FUNDULUS HETEROCLITUS (Linné).

Killifish; Mummichog; Chub; Minny. Tomcod; Cobler.

Garman, Mem. mus. comp. zoöl., 1895, vol. 19, p. 97, pl. 2, fig. 2; pl. 8, fig. 1.

Cobitis heteroclita Linné, Syst. nat., ed. 12, 1766, vol. 1, p. 500. "CAROLINA."

Fundulus pisculentus Cuv. & Val. Storer, Mem. Amer. acad., 1855, vol. 5, p. 294, pl. 23, fig. 3, 4.

Fundulus nigrofasciatus Cuv. & Val. Storer, Mem. Amer. acad., 1855, vol. 5, p. 295, pl. 23, fig. 1.

Fundulus heteroclitus macrolepidotus (Walbaum). Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 641.

ME.— Eastport (U. S. nat. mus. 1872 and 1892). Casco Bay (U. S. nat. mus. 1873, Bean 1880 and Lee 1885); ponds near New Meadows (Bowdoin college). Freeport (Kendall coll. 1892, 1898; 1899, 1900; 1901; 1902; 1903).

MASS.— Sandwich (LeSueur 1817); Holmes Hole, (Storer 1839); Cambridge; Boston (Storer 1855); Salem (Wheatland 1859); West Yarmouth (Lyman 1861); Waquoit (Lyman 1872);

Annisquam (B. S. N. H., Hyatt, VanVleck & Gardiner coll.); Cohasset (B. S. N. H., Bryant coll.); Woods Hole (Baird 1873; Bean 1880 and Smith 1898); Nantucket (Sharp & Fowler 1904).

R. I.— Newport (LeSueur 1817); Narragansett Bay (R. I. fish comm. 1899); Conimicut (Pope coll. 1894–97).

Conn.— Long Island Sound (Linsley 1844); Noank (Goode 1879).

115. Fundulus diaphanus (LeSueur).

Freshwater minnow; Shorefish; Flathead.

Garman, Mem. mus. comp. zoöl., 1895, vol. 19, p. 102, pl. 2, fig. 7. Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 645; 1900, pt. 2, pl. 103, fig. 275.

Hydrargira diaphana LeSueur, Journ. acad. nat. sci. Phil., 1817, vol. 1, p. 130. "Saratoga Lake, N. Y."

Fundulus multifasciatus Cuv. & Val. Storer, Mem. Amer. acad., 1855, vol. 5, p. 296, pl. 23, fig. 2.

Me.— Boyden and Pennamaquan lakes and Grand Lake Stream (Kendall & Smith 1894); Chickawaka Lake, Rockland (Kendall coll. 1895); Craigs Pond, Lake Auburn, Cobbosseecontee Lake; Stillwater River (Merrill coll. 1899); Marranocook Lake (Berry coll. 1899); brook at Brunswick (Bowdoin college); Matagamonsis Lake (Kendall coll. 1900 and Smith 1902); Hurd ponds; Cross Lake Thoroughfare (Kendall coll. 1901); Floods pond and outlet (Kendall coll. 1902).

Mass.— Concord; Lowell (Storer 1855); Fresh Pond, Cambridge (B. S. N. H., Putnam coll.); Annisquam (B. S. N. H., Hyatt, VanVleck & Gardiner coll.); Wenham Lake (Goode & Bean 1879); Quashnet River, Falmouth (Kendall coll. 1894); Woods Hole (Baird 1873; Smith 1898).

R. I.— "Narragansett Bay" (R. I. Fish Comm. 1899).

Conn.— "Common" (Linsley 1844).

TELEOSTOMI. HAPLOMI.

POECILIIDAE.

116. LUCANIA PARVA (Baird & Girard).

Rainwater fish.

Garman, Mem. mus. comp. zoöl., 1895, vol. 19, p. 93, pl. 3, fig. 3. Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 665; 1900, pt. 4, pl. 109, fig. 292.

Cyprinodon parvus Baird & Girard, Rept. 9, Smithsonian inst., 1855, p. 345. "GREENPORT, LONG ISLAND."

MASS.— Woods Hole (Smith 1898).

117. CYPRINODON VARIEGATUS Lacépède.

Sheepshead minnow.

Lacépède, Hist. nat. poissons, 1803, vol. 5, p. 486. "SOUTH CAROLINA." Storer, Mem. Amer. acad., 1867, vol. 9, p. 255. Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 671; 1900, pt. 4, pl. 111, fig. 296.

MASS.— West Yarmouth (Lyman 1861); Cape Cod (Storer 1867); Falmouth; Woods Hole (Baird 1873; Bean 1880 and Smith 1898).

CONN.— "Common"; Long Island Sound (Linsley 1844); Noank (Bean 1880).

SYNENTOGNATHI.

BELONIDAE.

118. TYLOSURUS MARINUS (Walbaum).

Garfish; Silver gar; Billfish.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 714.

Esox marinus Walbaum, Artedi Pisc., 1792, p. 88. —— *Belone truncata* LeSueur. Storer, Mem. Amer. acad., 1858, vol. 6, p. 314, pl. 24, fig. 3.

BELONIDAE.

Me.— Wolfsneck, Freeport, Casco Bay (Kendall coll.).

Mass.— Holmes Hole (Storer 1839 and 1859); Vineyard Sound (B. S. N. H., Storer and Kneeland coll.); Waquoit (Lyman 1872); Great Tisbury Pond, Marthas Vineyard (B. S. N. H., Davis coll.); Monomoy (Kendall coll. 1896); Woods Hole (Baird 1873; Bean 1880 and Smith 1898).

R. I.— Newport (LeSueur 1821); Narragansett Bay (R. I. fish comm. 1899); Wickford (Tracy 1906).

Conn.— Stratford; Hartford (Linsley 1844); Connecticut River near Hartford (Ayres 1844); Noank (Bean 1880).

119. Tylosurus acus (Lacépède).

Houndfish.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 716; 1900, pt. 4, pl. 116, fig. 309.

Sphyrna acus Lacépède, Hist. nat. poissons, 1803, vol. 5, p. 6, pl. 1, fig. 3. "Martinique."

Mass.— Woods Hole (Bean 1880 and Smith 1898); Buzzards Bay (Smith 1898); Nantucket (Sharp & Fowler 1904).

120. Athlennes hians (Cuvier & Valenciennes).

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 718. Bull. U. S. fish comm., 1905, vol. 23, pt. 1, p. 125, fig. 40.

Belone hians Cuv. & Val., Hist. nat. poissons, 1846, vol. 18, p. 432. "Havana, Bahia."

Mass.— Woods Hole (Smith 1898).

HEMIRHAMPHIDAE.

121. Hyporhamphus roberti (Cuvier & Valenciennes).

Halfbeak.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 721; 1900, pt. 4, pl. 117, fig. 312.

TELEOSTOMI. SYNENTOGNATHI.

HEMIRHAMPHIDAE.

Hemirhamphus roberti Cuv. & Val., Hist. nat. poissons, 1846, vol. 19, p. 24. "CAYENNE."

MASS.— Vineyard Sound: Menemsha Bight (Smith 1898).

R. I.— Newport (Cope 1870); Narragansett Bay (R. I. fish comm. 1899).

122. EULEPTORHAMPHUS VELOX Poey.

Poey, Synopsis, 1867, p. 383. "CUBA." Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 724.

MASS.— Off Nantucket, (Putnam 1870).

R. I.— Newport (Goode 1879).

SCOMBERESOCIDAE.

123. SCOMBERESOX SAURUS (Walbaum).

Billfish; Needlefish.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 725; 1900, pt. 4, pl. 117, fig. 314.

Esox saurus Walbaum, Artedi Pisc., 1792, p. 93. "CORNWALL."

Scomberesox storeri DeKay. Storer, Mem. Amer. acad., 1858, vol. 6, p. 315, pl. 24, fig. 4.

ME.— Monhegan (Goode & Bean 1879); Small Point, Casco Bay (Kendall coll. 1896); Old Orchard (Bowdoin college 1898).

MASS.— Cape Cod; Nantucket Shoals (Storer 1839); Provincetown (Storer 1859); Weir River, Hingham (B. S. N. H., Grütman coll.); Annisquam (B. S. N. H., Hyatt & VanVleck coll. 1879); Massachusetts Bay (Goode & Bean 1879); Cape Cod (Bean 1880); Woods Hole (Baird 1873; Bean 1880 and Smith 1898).

R. I.— Narragansett Bay (R. I. fish comm., 1899); Newport (Tracy 1906).

CONN.— Long Island Sound (Linsley 1844).

TELEOSTOMI. SYNENTOGNATHI.

EXOCOETIDAE.

124. PAREXOCOETUS MESOGASTER (Bloch).

Black-wing Flyingfish.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 728.

Exocoetus mesogaster Bloch, Ichthyologia 1795, pl. 399.

R. I.— Block Island (Goode 1879); Newport (Jordan & Meek 1885).

125. EXOCOETUS VOLITANS Linné.

Flyingfish.

Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 316. "IN ALTO PELAGO, EUROPAEO & AMERICANO" * * *. Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 734; 1900, pt. 4, pl. 118, fig. 318.

MASS.— Vineyard Sound; Woods Hole (Baird 1873 and Smith 1898).

CONN.— New Haven; Stonington (Linsley 1844).

126. EXOCOETUS RONDELETII Cuvier & Valenciennes.

Flyingfish.

Cuv. & Val., Hist. nat. poissons, 1846, vol. 19, p. 115, "NAPLES; SICILY; CANARIES." Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 733; 1900, pt. 4, pl. 118, fig. 317.

MASS.— Menemsha Bight (Smith 1901).

127. CYPSILURUS HETERURUS (Rafinesque).

Flyingfish.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 3, p. 2836.

TELEOSTOMI. SYNENTOGNATHI.

EXOCOETIDAE.

Exocoetus heterurus Rafinesque, Caratteri di alcuni nuovi generi, 1810, p. 58. "PALERMO." Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 735.

Exocoetus noveboracensis Mitchill. DeKay, N. Y., fauna, 1842, pt. 4, p. 230, pl. 36, fig. 114.

MASS.— Woods Hole; Menemsha Bight (Smith 1900).

R. I.— Block Island (Goode 1879).

128. CYPSILURUS FURCATUS (Mitchill).

Flying-fish.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 3, 2836.

Exocoetus furcatus Mitchill, Trans. lit. and phil. soc. N. Y., 1815, vol. 1, 149.

R. I.— Newport (Jordan & Meek 1885 and Tracy 1906).

129. CYPSILURUS GIBBIFRONS (Cuvier & Valenciennes).

Flyingfish.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 3, p. 2836.

Exocoetus gibbifrons, Cuv. & Val., Hist. nat. poissons, 1846, vol. 19, p. 118. "ATLANTIC." Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 741.

R. I.— Newport (Jordan & Evermann 1896).

HEMIBRANCHI.

GASTEROSTEIDAE.

130. EUCALIA INCONSTANS (Kirtland).

Brook Stickleback.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 744.

TELEOSTOMI. HEMIBRANCHII.

GASTEROSTEIDAE.

Gasterosteus inconstans Kirtland, Bost. journ. nat. hist., 1841, vol. 3, p. 273, pl. 2, fig. 1. "TRUMBULL COUNTY, OHIO."

ME.— Tributary brook of Cobbosseecontee Lake (Smith 1900; Kendall 1903).

VT.— Mouth of Franklin Brook (Evermann & Kendall 1894).

131. PUNGITIUS PUNGITIUS (Linné).

Nine-spined stickleback.

Gasterosteus pungitius Linné. Syst. nat., ed. 10, 1758, vol. 1, p. 296. "EUROPA." Storer, Mem. Amer. acad., 1853, vol. 5, p. 91, pl. 8, fig. 5.

Pygosteus pungitius Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 745.

ME.— Kennebec County (Storer 1837); Eastport (U. S. nat. mus. 1872); Brunswick (Bowdoin college 1890); Grand Lake Stream (Kendall 1894); Casco Bay (Lee 1885); Freeport (Kendall coll.); Cross Lake Thoroughfare, Aroostook County (Kendall coll. 1901 and 1903); Sebois River (Kendall coll. 1902).

MASS.—Salem (Storer 1839); Salem (Wheatland 1859); Fresh-water pond, Annisquam (B. S. N. H., Hyatt, Van Vleck & Gardiner coll.); Quashnet River, Falmouth (Kendall coll. 1894); Woods Hole (Baird 1873; Bean 1880 and Smith 1898).

R. I.— (Tracy 1906).

CONN.— Housatonic (Linsley 1844); Hockanum River (Ayres 1844).

132. GASTEROSTEUS ACULEATUS Linné.

Three-spined stickleback; Thornback; stickleback; Hornpout.

Linné, Syst. nat. ed. 10, 1758, vol. 1, p. 295. "EUROPA." Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 747; 1900, pl. 99, fig. 320.

TELEOSTOMI. HEMIBRANCHII.

GASTEROSTEIDAE.

Gasterosteus bispinosus Walbaum. Jordan & Evermann, Bull. 47, U. S. Nat. Mus., 1896, pt. 1, p. 748.

Gasterosteus biaculeatus Mitchill. Storer, Mem. Amer. acad., 1853, vol. 5, p. 88, pl. 8, fig. 2, 3.

Me.—Eastport (U. S. nat mus. 1872; Kendall coll. 1893); Rockland (Kendall coll. 1895); Casco Bay and tributary waters (Kendall coll.); New Meadows River (Bowdoin College); Brook in Brunswick (Kendall coll. 1903).

Mass.—Provincetown; Boston (Storer 1839); Nahant; Brookline (Storer 1853); Salem (Wheatland 1859); Annisquam (B. S. N. H., Hyatt, VanVleck & Gardiner coll.); Cohasset (B. S. N. H., Bryant coll.); Malden (B. S. N. H., Sandborn coll.); Wood's Hole (Baird 1873; Bean 1880 and Smith 1898).

R. I.—Narragansett Bay (R. I. Fish Comm. 1899).

Conn.—Stratford (Linsley 1844); Noank (B. S. N. H., Hyatt & Rathbun coll.).

133. Gasterosteus atkinsii Bean.

Freshwater stickleback.

Bean, Proc. U. S. nat. mus. 1879, vol. 2, p. 67. "Schoodic Lakes, Me."

Gasterosteus bispinosus atkinsii (Bean). Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 748.

Me.—Grand Lake Stream (Bean 1879); Tributary of Cobosseecontee Lake (Kendall coll. 1899); Lake Auburn (Kendall coll. 1900); Billfish Brook, tributary Matagamon River; Matagamonsis, Webster, Telos, Chamberlain, Eagle, Churchill and Glasier, lakes; Allagash River and Cross Lake Thoroughfare (Kendall coll. 1901); Matagamon Waters (Smith 1902); Moosehead Lake (Kendall coll. 1902); Floods Pond (Kendall coll. 1903).

TELEOSTOMI. HEMIBRANCHI.

GASTEROSTEIDAE.

134. GASTEROSTEUS BISPINOSUS Walbaum.

Two-spined stickleback.

Walbaum, Artedi Pisc., 1792, p. 450. "NEAR NEW YORK, HEMPSTEAD, L. I.]"

Gasterosteus wheatlandi Putnam. Storer, Mem. Amer. acad., 1867, vol. 9, p. 279.

Gasterosteus gladiunculus Kendall. Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 3, p. 2836.

ME.— Along the whole coast in salt and brackish water. Bay of Fundy (Bowdoin college 1891); Creek at Small Point, Casco Bay; off Monhegan Island (Kendall coll. 1896); Porters Landing, Freeport (Kendall coll. 1898; 1899, 1900 and 1903); New Meadows River (Bowdoin college 1901).

MASS.— Swampscott (M. C. Z.); Nahant (Storer 1867); Woods Hole (Smith 1898).

CONN.— Stratford [?] (Linsley 1844).

135. APELTES QUADRACUS (Mitchill).

Four-spined stickleback; Bloody stickleback.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 752; 1900, pt. 4, pl. 120, fig. 322.

Gasterosteus quadracus Mitchill, Trans. lit. & philos. soc. N. Y., 1815, vol. 1, p. 430. "NEW YORK." Storer, Mem. Amer. acad., 1853, vol. 5, p. 89, pl. 8, fig. 4.

ME.— Along the whole coast in brackish water. Eastport (U. S. nat. mus. 1872); Casco Bay (U. S. nat. mus. 1873); Chickawaka Lake and outlet, Rockland (Smith & Kendall 1896); Freeport (Kendall coll. 1898–1903).

MASS.— Salem (Storer 1839 and Wheatland 1859); from Boston to Provincetown (Storer 1853); freshwater pond, Annis-

GASTEROSTEIDAE.

quam (B. S. N. H., Hyatt, Van Vleck & Gardiner coll.); Quashnet River, Falmouth (Kendall coll. 1894); Woods Hole (Baird 1873; Bean 1880 and Smith 1898).

R. I.— Narragansett Bay (R. I. Fish Comm. 1899).

CONN.— Hartford; Stonington; Stratford (Linsley 1844); Noank (Bean 1880).

FISTULARIIDAE.

136. FISTULARIA TABACARIA Linné.

Trumpetfish.

Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 312. "IN AMERICA." Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 757.

Fistularia serrata Bloch. Storer, Mem. Amer. acad., 1858, vol. 6, p. 318, pl. 25, fig. 1.

MASS.— Holmes Hole (Storer 1839; 1849 and 1859); Rockport (Goode & Bean 1879); Woods Hole (Goode 1879); Buzzards Bay (Smith 1898).

R. I.— Narragansett Bay (R. I. Fish Comm. 1899).

MACRORHAMPHOSIDAE.

137. MACRORHAMPHOSUS SCOLOPAX (Linné).

Snipefish.

Goode & Bean, Oceanic ichth., 1896, p. 483, pl. 117, fig. 396. Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 759.

Balistes scolopax Linné, Syst. nat. ed. 10, 1758, vol. 1, p. 329. "MEDITERRANEAN."

MASS.— Provincetown (Storer 1857; Goode & Bean 1879); Massachusetts Bay (Goode & Bean 1896).

TELEOSTOMI. LOPHOBRANCHII.

SYNGNATHIDAE.

138. SYNGNATHUS FUSCUS Storer.

Pipefish.

Storer, Report, 1839, p. 162. "NAHANT, HOLMES HOLE [MASS.]"
Siphostoma fuscum (Storer). Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 770.
Syngnathus peckianus Storer, Report, 1839, p. 163, pl. 1, fig. 2, and Mem. Amer. acad., 1863, vol. 8, p. 412, pl. 33, fig. 3.

ME.— Eastport (U. S. Fish Comm. coll. 1890; Kendall coll. 1893); Casco Bay (U. S. nat. mus. 1887; Lee 1885; Bowdoin College; Kendall coll. 1898–1900); off the coast (Kendall coll. 1895).
N. H.— Piscataqua River.
MASS.— Nahant; Holmes Hole (Storer 1839); West Yarmouth (Lyman 1861); Boston Harbor (Storer 1863); Massachusetts Bay (B. S. N. H., Storer coll., Cutting coll.); Cohasset, Boston (B. S. N. H., Bryant coll., Kneeland coll.); Annisquam (B. S. N. H., Hyatt, Van Vleck & Gardiner coll.); Cape Ann; Swampscot (B. S. N. H.), Cape Cod (Storer [Putnam] 1867); Salem; Beverly Bridge (Goode & Bean 1879); Woods Hole (Baird 1873; Bean 1880 and Smith 1898); Nantucket (Sharp & Fowler 1904).
R. I.—Narragansett Bay (R .I. fish comm. 1899 and Pope coll.).
CONN.— Stratford (Linsley 1844); Long Island Sound, off Stratford; Bridgeport; Middle Ground; Penfield Reef (Kendall coll., 1890); off S. W. Ledge; off Branford Beacon; off Norwalk Light House (Kendall coll. 1892).

139. HIPPOCAMPUS HUDSONIUS DeKay.

Sea-horse.

DeKay, N. Y. fauna, 1842, pt. 4, p. 322, pl. 53, fig. 171. "NEW YORK." Storer, Mem. Amer. acad., 1863, vol. 8, p. 416, pl. 33, fig. 4. Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 777; 1900, pt. 4, pl. 122, fig. 327.

TELEOSTOMI. LOPHOBRANCHII.

SYNGNATHIDAE.

MASS.— Holmes Hole (Storer 1839 and 1863); Provincetown. (Atwood 1850); Massachusetts Bay? (Goode & Bean 1879); Vineyard Sound (Smith 1898).

R. I.— Narragansett Bay (R. I. Fish Comm. 1899).

ACANTHOPTERI.

PERCOPSIDAE.

140. PERCOPSIS GUTTATUS Agassiz.

Trout-perch; Sand roller.

Agassiz, Lake Superior, 1850, p. 286. "LAKE SUPERIOR." Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 784; 1900, pt. 4, pl. 121, fig. 329.

VT.— Lake Champlain; Winooski River (Thompson 1850 and 1853).

ATHERINIDAE.

141. MENIDIA BERYLLINA CEREA Kendall.

Waxen silverside.

Kendall, Rept. U. S. fish comm., 1901, 1902, p. 261, fig. "WOODS HOLE."

Menidia gracilis (Günther). Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 797.

MASS.— Truro; Sandwich; Falmouth; Woods Hole; Wareham River; New Bedford (Kendall 1901).

R. I.— Narragansett Bay (R. I. Fish Comm. 1899).

142. MENIDIA MENIDIA NOTATA (Mitchill).

Silversides; Britt; Sand smelt; Capelin.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 3, p. 2840.

TELEOSTOMI. ACANTHOPTERI.

ATHERINIDAE.

Atherina notata Mitchill, Trans. lit. & philos. soc. N. Y., 1815, vol. 1, p. 446. "NEW YORK." Storer, Mem. Amer. acad., 1853, vol. 5, p. 165, pl. 16, fig. 1.

Menidia notata (Mitchill). Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 800.

ME.— Along the whole coast; Eastport (Kendall coll. 1893); Orland (Bean 1880); Casco Bay (U. S. nat. mus. 1873; Kendall coll., 1892; 1898–1902).

N. H.— Piscataqua River (Storer 1853).

MASS.— Provincetown; Holmes Hole (Storer 1839); West Yarmouth (Lyman 1861); Charles River (Storer 1853); Annisquam (B. S. N. H., Hyatt, Van Vleck & Gardiner coll.); Gloucester (Kendall 1903); Woods Hole (Baird 1873; Bean 1880 and Smith 1898); Nantucket (Sharp & Fowler, 1904).

R. I.— Narragansett Bay (R. I. fish comm. 1899); Conimicut (Pope coll. 1894–97).

CONN.— Stratford (Linsley 1844); Noank (B. S. N. H., Hyatt & and Rathbun coll.); Bridgeport (Kendall coll., 1890).

MUGILIDAE.

143. MUGIL CEPHALUS Linné.

Striped mullet.

Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 316. "IN OCEANO EUROPAEO." Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 811; 1900, pt. 4, pl. 126, fig. 343.

Mugil lineatus Mitchill. Storer, Mem. Amer. acad., 1853, vol. 5, p. 167, pl. 16, fig. 4.

ME.— Wolfsneck, Casco Bay (Kendall 1903 and Smith 1902).

MASS.— Provincetown (Storer 1852 and 1853); Woods Hole (Baird 1873; Bean 1880 and Smith 1898).

MUGILIDAE.

R. I.— Newport (Bean 1880); Narragansett Bay (R. I. fish comm. 1899).

CONN.— Stratford (Linsley 1844).

144. MUGIL CUREMA Cuvier & Valenciennes.

White mullet.

Cuv. &. Val. Hist. nat. poissons, 1836, vol. 11, p. 87. "BRAZIL; MARTINIQUE; CUBA." Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 813; 1900, pt. 4, pl. 126, fig. 344.

MASS.— Woods Hole (Bean 1880 and Smith 1898).

R. I.— Narragansett Bay (R. I. fish comm., 1899).

145. MUGIL TRICHODON Poey.

Fantail mullet.

Poey, Ann. Lyc. nat. hist. N. Y., 1875, vol. 11, p. 66, pl. 8, fig. 4–6. "CUBA." Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 816.

MASS.— Woods Hole (Smith 1898).

CONN.— Stonington (Linsley 1844).

SPHYRAENIDAE.

146. SPHYRAENA BARRACUDA (Walbaum).

Barracuda.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 3, p. 2841; 1900, pt. 4, pl. 128, fig. 349.

Esox barracuda Walbaum, Artedi Pisc., 1792, p. 94.

Sphyraena picuda Bloch & Schneider. Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 823.

MASS.— Woods Hole (Smith 1898).

TELEOSTOMI. ACANTHOPTERI.

SPHYRAENIDAE.

147. SPHYRAENA GUACHANCHO Cuvier & Valenciennes.

Barracuda; Guaguancho.

Cuv. & Val., Hist. nat. poissons, 1829, vol. 3, p. 342. "HAVANA." Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 824.

MASS.— Woods Hole (Goode & Bean 1880); Woods Hole and Buzzards Bay (Smith 1898).

R. I.— Narragansett Bay (R. I. fish comm. 1899); Willow Beach, near Wickford (Tracy 1906).

148. SPHYRAENA BOREALIS DeKay.

Northern barracuda.

DeKay, N. Y. Fauna, 1842, pt. 4, p. 37, pl. 60, fig. 196. "NEW YORK." Storer, Mem. Amer. acad., 1853, vol. 5, p. 163, pl. 12, fig. 3. Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 825.

MASS.— Holmes Hole (Storer 1843 d and 1853); Marthas Vineyard (B. S. N. H., Storer coll.); Woods Hole (Bean 1880 and Smith 1898); Buzzards Bay (Smith 1898).

POLYNEMIDAE.

149. POLYDACTYLUS OCTONEMUS (Girard).

Threadfin.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 830; 1900, pt. 4, pl. 128, fig. 350.

Polynemus octonemus Girard, Proc. acad. nat. sci. Phil., 1858, p. 167. "BRAZO; SANTIAGO; GALVESTON."

MASS.— Woods Hole (Smith 1898).

AMMODYTIDAE.

150. AMMODYTES DUBIUS Reinhardt.

Sand Launce; Lant.

Reinhardt, Kong. Dansk. vid. selsk. Afh., 1838, vol. 7, p. 132.

AMMODYTIDAE.

"GREENLAND." Storer, Mem. Amer. acad., 1867, vol. 9, p. 281. Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 832.

MASS.— Boston (Günther 1862); Woods Hole (Smith 1898).

151. AMMODYTES AMERICANUS DeKay.

Sand Launce; Lant; Sand eel.

DeKay, N. Y. Fauna, 1842, pt. 4, p. 317, pl. 52, fig. 167.—— Storer, Mem. Amer. acad., 1863, vol. 8, p. 410, pl. 33, fig. 2. Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 833; 1900, pt. 4, pl. 129, fig. 351.

ME.— Eastport (Kendall coll. 1893); Small Point, Casco Bay (Kendall coll. 1896).

MASS.— Holmes Hole; Provincetown (Storer 1863); Nantucket (Bean 1880); North Truro; Monomoy; Menemsha Bight (Kendall coll. 1896); Gloucester (B. S. N. H., Hyatt, VanVleck and Gardiner coll.); Woods Hole (Baird 1873; Bean 1880 and Smith 1898).

R. I.— Narragansett Bay (R. I. Fish Comm. 1899).

CONN.— Long Island Sound; Stratford (Linsley 1844).

HOLOCENTRIDAE.

152. HOLOCENTRUS ASCENSIONIS (Osbeck).

Squirrelfish.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 849; 1900, pt. 4, pl. 131, fig. 138.

Perca ascensionis Osbeck, Iter in China, 1771, p. 388, "ASCENSION ISLAND."

MASS.— Katama Bay [?] (Bean 1899 and Smith? 1900).

R. I.— Newport (Goode 1879).

MULLIDAE.

153. MULLUS AURATUS (Jordan & Gilbert).

Surmullet.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 856; 1900, pt. 4, pl. 132, fig. 360.

Mullus barbatus auratus Jordan & Gilbert, Proc. U. S. nat. mus., 1882, vol. 5, p. 280. "PENSACOLA."

MASS.— Woods Hole (Smith 1898).

SCOMBRIDAE.

154. SCOMBER SCOMBRUS Linné.

Mackerel.

Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 297. "IN OCEANO ATLANTICO." Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 866; 1900, pt. 4, pl. 123, fig. 363.

Scomber vernalis Mitchill. Storer, Mem. Amer. acad., 1853, vol. 5, p. 132, pl. 11, fig. 2.

ME.— All along the coast. Boon Island Ledge (Atwood 1865); Eastport (U. S. nat. mus. 1872); Casco Bay (U. S. nat. mus. 1873; Lee 1885); Kendall coll. 1892 and 1896, 1899 and 1900); off Mount Desert, Monhegan, Casco Bay and Boone Island (Kendall coll. 1895).

MASS.— Massachusetts Bay; Cape Cod; Nantucket; Vineyard Sound (Storer 1853); Boston Bay (B. S. N. H., Cutting coll.); Provincetown (Atwood 1865 and Bean 1880); Waquoit (Lyman 1872); Annisquam (B. S. N. H., Hyatt, Van Vleck and Cutting coll.); Gloucester (Bean 1880); off Gay Head; at Menemsha Bight; Monomoy; North Truro (Kendall coll. 1896); Woods Hole (Baird 1873; Bean 1880 and Smith 1898); Nantucket (Sharp & Fowler 1904).

R. I.— Narragansett Bay (R. I. fish comm. 1899 and Pope coll.);

off Block Island (Kendall coll. 1896) Sakonnet River; Newport; Block Island (Tracy 1906).

CONN.— Branford; Stratford (Linsley 1844).

155. SCOMBER JAPONICUS Houttuyn.

Chub mackerel; Hardhead; Bullseye; Spanish mackerel.

Houtuyn, Verhandl. Holl. maatsch. Haarlem, 1782, vol. 20, p. 381. "JAPAN."

Scomber dekayi Storer, Mem. Amer. acad., 1853, vol. 5, p. 130, pl. 11, fig. 1.

Scomber colias Gmelin. Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 866; 1900, pt. 4, pl. 133, fig. 364.

ME.— Off Casco Bay (Bowdoin college 1893; Kendall coll. 1895); Small Point, Casco Bay (Kendall coll. 1896).

MASS.— Provincetown (Storer 1853, and Bean 1880); Lynn? (Storer 1853); off Gay Head; Monomoy (Kendall coll. 1898) Vineyard Sound (Smith 1898).

CONN.— Stratford (Linsley 1844).

156. AUXIS THAZARD (Lacépède).

Frigate mackerel.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 867; 1900, pt. 4, pl. 133, fig. 365.

Scomber thazard Lacépède, Hist. nat. poissons 1802, vol. 3, p. 9. "6° and 7° S. LATITUDE, COAST OF NEW GUINEA."

MASS.— Menemsha Bight (Smith 1898).

R. I.— Narragansett Bay (R. I. fish comm. 1899).

157. GYMNOSARDA PELAMIS (Linné).

Oceanic bonito; Striped bonito.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 868.

TELEOSTOMI. ACANTHOPTERI.

SCOMBRIDAE.

Scomber pelamis Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 297. "IN PELAGO INTER TROPICOS."

MASS.— Provincetown; Vineyard Sound (Goode & Bean 1879); Chilmark (Goode 1879); Woods Hole (Bean 1880); Menemsha Bight (Smith 1898).

158. GYMNOSARDA ALLETERATA (Rafinesque).

Little tunny; Bonito.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 869; 1900, pt. 4, pl. 134, fig. 366.

Scomber alleterata Rafinesque, Caratteri di alcuni generi nuovi, 1810, p. 46. "PALERMO."

MASS.— Woods Hole (Baird 1873); Vineyard Sound (Smith 1898).

159. THUNNUS THYNNUS (Linné).

Tunny; Horse mackerel; Tuna.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 870.

Scomber thynnus Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 297. "INTER TROPICOS IN PELAGO."

Thynnus secundo-dorsalis Storer, Mem. Amer acad., 1853, vol. 5, p. 143, pl. 12, fig. 4.

ME.— Eastport (Kendall coll. 1893).

MASS.— Kettle Island; Pigeon Cape (Storer 1839); North River, Salem (Wheatland 1852); Cape Ann; Provincetown; Massachusetts Bay (Storer 1853); Milk Island; North River, Salem; beach at Beverly (Goode & Bean 1879); Woods Hole (Baird 1873 and Smith 1898); Nantucket (Sharp & Fowler 1904).

SCOMBRIDAE.

160. GERMO ALALUNGA (Gmelin).

Long-finned albacore.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 871; 1900, pt. 4, pl. 134, fig. 367.

Scomber alatunga [sic] Gmelin, Syst. nat., 1788, vol. 1, p. 1330. "SARDINIA."

MASS.— Woods Hole (Smith 1898).

161. SARDA SARDA (Bloch).

Bonito; Skipjack.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 872.

Scomber sarda Bloch, Nat. ausl. fische, 1793, vol. 4, p. 44, pl. 334, "EUROPE."

Pelamys sarda Cuvier. Storer, Mem. Amer. acad., 1853, vol. 5, p. 141, pl. 11, fig. 5.

ME.— Harpswell, Casco Bay (Bowdoin college 1890).

MASS.— Holmes Hole (Storer 1839); Lynn; Nahant (Storer 1842f); Holmes Hole; Lynn (Storer 1844); Provincetown; Lynn; Marthas Vineyard (Storer 1853); Waquoit (Lyman 1872); Woods Hole (Baird 1873); Menemsha Bight (Smith 1898); Cedar Tree Neck (Sherwood & Edwards 1901); Nantucket (Sharp & Fowler 1904).

R. I.— Narragansett Bay (R. I. fish comm. 1899).

CONN.— Stonington (Linsley 1844); Noank (Bean 1880).

162. SCOMBEROMORUS MACULATUS (Mitchill).

Spanish mackerel.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 874; 1900, pt. 4, pl. 134, fig. 368.

SCOMBRIDAE.

Scomber maculatus Mitchill, Trans. lit. & philos. soc. N. Y., 1815, vol. 1, p. 426, pl. 6, fig. 8. "NEW YORK."

Cymbium maculatum, Storer, Mem. Amer. acad., 1853, vol. 5, p. 146, pl. 13, fig. 1.

ME.— Monhegan (Storer 1853).

MASS.— Lynn (Storer 1842a); Massachusetts Bay (Storer 1842c); Provincetown (Storer 1853); Woods Hole (Baird 1873); Vineyard Sound; Buzzards Bay (Smith 1898); Nantucket (Sharp & Fowler 1904).

R. I.— Narragansett Bay (R. I. Fish Comm. 1899); Princes Neck, Newport (Tracy 1906).

CONN.— Long Island Sound (Linsley 1844).

163. SCOMBEROMORUS REGALIS (Bloch).

Kingfish; Cero.

Jordan & Evermann, Bull. U. S. nat. mus., 1896, pt. 1, p. 875; 1900, pt. 4, pl. 135, fig. 369.

Scomber regalis Bloch, Nat. ausl. fische, 1793, vol. 4, p. 38, pl. 333. "MARTINIQUE."

MASS.—Woods Hole (Baird 1873); Monomoy (Kendall coll. 1896); Vineyard Sound (Smith 1898).

R. I.— Narragansett Bay (Tracy 1906).

164. SCOMBEROMORUS CAVALLA (Cuvier).

Sierra.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 875.

Cymbium cavalla Cuvier, Regne anim., ed. 2, 1829, vol. 2, p. 200. "BRAZIL."

MASS.— Vineyard Sound (Smith 1898).

TRICHIURIDAE.

165. TRICHIURUS LEPTURUS Linné.

Scabbardfish; Cutlassfish; Hairtail.

Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 246. "AMERICA; CHINA"; Storer, Mem. Amer. acad., 1853, vol. 5, p. 147, pl. 12, fig. 1. Jordan & Evermann, Bull. 47, U. S. nat mus., 1896, pt. 1, p. 889; 1900, pt. 4, pl. 137, fig. 375.

ME.— Monhegan (Storer 1853).

MASS.— (Storer 1842); Buzzards Bay (Storer 1842f); Massachusetts Bay (Storer 1845); Lynn; Provincetown (Storer 1853); Wellfleet; Salem Harbor (Goode & Bean 1879); Woods Hole (Goode 1879); Menemsha Bight (Smith 1898); Nantucket (Sharp & Fowler 1904).

R. I.— Newport (Sherwood & Edwards 1901); Narragansett Bay (R. I. fish comm. 1899).

ISTIOPHORIDAE.

166. ISTIOPHORUS NIGRICANS (Lacépède).

Sailfish.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 891; 1900, pt. 4, pl. 137, fig. 376.

Makaira nigricans Lacépède, Hist. nat. poissons 1802, vol. 4, p. 688. "ROCHELLE."

MASS.— Woods Hole (Baird 1873 and Smith 1898).

R. I.— Newport (Goode 1884).

167. TETRAPTERUS IMPERATOR (Bloch & Schneider).

Spearfish.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 892.

TELEOSTOMI. ACANTHOPTERI.

ISTIOPHORIDAE.

Xiphias imperator Bloch & Schneider, Syst. ichth., 1801, p. 93, pl. 21. "MEDITERRANEAN."

MASS.— Woods Hole (Baird 1873); Vineyard Sound; Buzzards Bay (Smith 1898).

R. I.— Narragansett Bay (R. I. fish comm. 1899).

XIPHIIDAE.

168. XIPHIAS GLADIUS Linné.

Swordfish.

Linné, Syst. nat. ed. 10, 1758, vol. 1, p. 248. "EUROPA." Storer, Mem. Amer. acad., 1853, vol. 5, p. 149, pl. 13, fig. 2; Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 894.

ME.— Off Mt. Desert (Williamson 1832); off Portland (Goode 1884); Casco Bay (B. S. N. H., Davidson coll.).

MASS.— Marthas Vineyard; Gay Head; off Nantucket (Storer 1853); Woods Hole (Baird 1873); off Nomans Land (Goode 1879); Vineyard Sound (Smith 1898); Nantucket (Sharp & Fowler 1904).

R. I.— Narragansett Bay (R. I. fish comm. 1899).

CONN.— New Haven (Linsley 1844); Block Island; off Sakonnet Point (Tracy 1906).

CARANGIDAE.

169. OLIGOPLITES SAURUS (Bloch & Schneider).

Leather Jacket.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 898; 1900, pt. 4, pl. 138, fig. 378.

Scomber saurus Bloch & Schneider, Syst. ichth., 1801, p. 321. "JAMAICA."

CARANGIDAE.

MASS.— Menemsha Bight; Woods Hole (Smith 1898).
R. I.— Newport (Goode 1884).

170. NAUCRATES DUCTOR (Linné).

Pilotfish.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 900; 1900, pt. 4, pl. 139, fig. 379.

Gasterosteus ductor Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 295. "IN PELAGO."

ME.— Near Seguin (Bowdoin college).
MASS.— Provincetown? (Atwood 1859); Woods Hole (Smith 1898).
R. I.— Narragansett Bay (R. I. fish comm. 1899).
CONN.— Stonington (Linsley 1844).

171. SERIOLA ZONATA (Mitchill).

Rudderfish; Shark pilot.

Storer, Mem. Amer. acad., 1853, vol. 5, p. 157, pl. 15, fig. 5. Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 902; 1900, pt. 4, pl. 139, fig. 381.

Scomber zonatus Mitchill, Trans. lit. & philos. soc. N. Y., 1815, vol. 1, p. 427. "BAY OF NEW YORK."

MASS.— Wellfleet (Storer 1844a and 1853); Provincetown (Storer 1850); Beverly; North River, Salem (Goode & Bean 1879); Woods Hole; New Bedford (Bean 1880); Vineyard Sound Woods Hole (Baird 1873; Smith 1898); Nantucket (Sharp & Fowler 1904).
R. I.— Newport (Bean 1880); Narragansett Bay (R. I. Fish Comm. 1899).
CONN.— Long Island Sound (Linsley 1844).

TELEOSTOMI. ACANTHOPTERI.

CARANGIDAE.

172. SERIOLA LALANDI Cuvier & Valenciennes.

Amber Jack.

Cuvier & Valenciennes, Hist. nat. poissons, 1833, vol. 9, p. 208. "BRAZIL." Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 903; 1900, pt. 4, pl. 140, fig. 382.

MASS.— Woods Hole (Smith 1898).
R. I.— Narragansett Bay (R. I. fish comm. 1899).

173. SERIOLA DUMERILI (Risso).

Amber Jack.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 903.
Caranx dumerili Risso, Ichthyol. Nice, 1810, p. 175, pl. 6, fig. 20. "NICE."

MASS.— Woods Hole (Smith & Kendall 1896 and Smith 1898).

174. DECAPTERUS PUNCTATUS (Agassiz).

Scad; Round robin; Cigarfish.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 907.
Caranx punctatus Agassiz, Spix Pisc. Bras., 1829, p. 108, pl. 56a fig. 2. "BRAZIL."

MASS.— Woods Hole (Baird 1873; Bean 1880 and Smith 1898).
R. I.— Narragansett Bay (R. I. fish comm. 1899).
CONN.— East Haven (Linsley 1844).

175. DECAPTERUS MACARELLUS (Cuvier & Valenciennes).

Mackerel Scad.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 909; 1900, pt. 4, pl. 140, fig. 383.
Caranx macarellus Cuv. & Val., Hist. nat. poissons, 1833, vol. 9, p. 40. "MARTINIQUE."

CARANGIDAE.

MASS.— Woods Hole (Baird 1873 and Smith 1898); Vineyard Sound (Smith 1898).

R. I.— Newport (Goode 1879); Narragansett Bay (R. I. fish comm. 1899).

176. TRACHURUS TRACHURUS (Linné).

Saurel.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 910; 1900, pt. 4, pl. 140, fig. 384.

Scomber trachurus Linné Syst. nat., ed. 10, 1758, p. 298. "IN MEDITERRANEO."

R. I.— Newport (Goode 1882).

177. TRACHUROPS CRUMENOPTHALMUS (Bloch).

Big-eyed Scad; Goggle-eye.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 911; 1900, pt. 4, pl. 141, fig. 385.

Scomber crumenopthalmus Bloch, Nat. ausl. fische, 1793, vol. 4, p. 77, pl. 343. "ACARA IN GUINEA."

MASS.— Woods Hole (Baird 1873; Bean 1880 and Smith 1898).

R. I.— Newport (Bean 1880); Narragansett Bay (R. I. fish comm. 1899).

178. CARANGUS BARTHOLOMAEI (Cuvier & Valenciennes).

Yellow Jack.

Caranx bartholomaei Cuv. & Val., Hist. nat. poissons, 1833, vol 9, p. 100. "SAINT BARTHÉLEMI." Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 919.

MASS.— Woods Hole (Smith 1898).

CARANGIDAE.

179. CARANGUS HIPPOS (Linné).

Crevalle.

Scomber hippos Linné, Syst. nat., ed. 12, 1766, vol. 1, p. 494. "CAROLINA."

Caranx hippos (Linné). Jordan & Evermann, Bull. 47 U. S., nat. mus., 1896, pt. 1, p. 920; 1900, pt. 4, pl. 141, fig. 387.

MASS.— Lynn Beach (Wheatland 1852 and Goode & Bean 1879); Woods Hole (Baird 1873; Bean 1880 and Smith 1898).

R. I.— Newport (Bean 1880).

180. CARANGUS CRYSOS (Mitchill).

Hardtail; Runner.

Scomber crysos Mitchill, Trans. lit. & philos. soc. N. Y., 1815, vol. 1, p. 424. "NEW YORK."

Caranx chrysos Cuv. Storer, Mem. Amer. acad., 1853, vol. 5, p. 153, pl. 14, fig. 1.

Caranx crysos (Mitchill). Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 921.

MASS.— Boston (Storer 1843) Charleston (Storer 1853); Ipswich Bay (B. S. N. H., Hyatt & Van Vleck coll.); Provincetown; off Gloucester (Goode & Bean 1879); Woods Hole (Baird 1873 and Bean 1880); Buzzards Bay (Smith 1898); Nantucket (Sharp & Fowler 1904).

R. I.— Newport (Bean 1880); near Saunders own, Narragansett Bay (Tracy 1906).

181. ALECTIS CILIARIS (Bloch).

Thread fish.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 931.

CARANGIDAE.

Zeus ciliaris Bloch, Nat. ausl. fische, 1787, vol. 2, p. 236, pl. 29. "East Indies."

Mass.— Woods Hole (Baird 1873; Bean 1880 and Smith 1898).

R. I.— Newport (Bean 1880); Narragansett Bay (R. I. fish comm. 1900).

Conn.— Stratford (Linsley 1844).

182. Vomer setapinnis (Mitchill).

Moonfish; Horsefish; Bluntnose; Shiner.

Zeus setapinnis Mitchill, Trans. lit. & philos. soc. N. Y., 1815, vol. 1, p. 384, pl. 1, fig. 9. "New York."

Argyreiosus unimaculatus Batchelder. Storer. Mem. Amer. acad., 1853, vol. 5, p. 156, pl. 14, fig. 2.

Vomer setipinnis (Mitchill). Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 934; 1900, pt. 4, pl. 144, fig. 392.

Me.— Saco (Batchelder 1845); Casco Bay (B. S. N. H.).

Mass.— Near South Boston (Storer 1853); Danvers; North River, Salem; Gloucester (Goode & Bean 1879) [?]; Woods Hole (Baird 1873 and Bean 1880); Vineyard Sound; Buzzards Bay (Smith 1898).

R. I.— Newport (Cope 1870 and Bean 1880); Narragansett Bay (R. I. fish comm. 1899).

Conn.— Greenwich (Linsley 1844).

183. Selene vomer (Linné).

Moonfish; Horsehead; Lookdown.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 936; 1900, pt. 4, pl. 144, fig. 393, pl. 145, fig. 393 a.

Zeus vomer Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 266. "America."

Argyreiosus capillaris DeKay. Storer, Mem. Amer. acad., 1853, vol. 5, p. 155, pl. 14, fig. 3.

CARANGIDAE.

ME.— Casco Bay (Bowdoin college 1880; U. S. nat. mus. 1887).

MASS.— New Bedford (Storer 1843 and 1853); Woods Hole. (Smith 1898); Nantucket (Sharp & Fowler 1904) Dorchester (B. S. N. H., Hersey coll.).

R. I.— Narragansett Bay (R. I. fish comm. 1899).

CONN.— Stratford (Linsley 1844); Long Island Sound Middleground (Kendall coll. 1890).

184. CHLOROSCOMBRUS CHRYSURUS (Linné).

Bumper; Yellowtail.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 938; 1900, pt. 4, pl. 145, fig. 394.

Scomber chrysurus Linné, Syst. nat., ed. 12, 1766, vol. 1, p. 494. "IN CAROLINA."

MASS.— Cape Cod?

185. TRACHINOTUS FALCATUS (Linné).

Round pompano.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 941; 1900, pt. 4, pl. 146, fig. 396.

Labrus falcatus Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 284. "IN AMERICA."

MASS.— Woods Hole (Baird 1873 and Smith 1898); Nantucket (Sharp & Fowler 1904).

R. I.— Narragansett Bay (R. I. fish comm. 1899).

186. TRACHINOTUS GOODEI Jordan & Evermann.

Permit.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 943. "WEST INDIES, NORTH TO WEST FLORIDA."

MASS.— Woods Hole, young (Smith 1898).

CARANGIDAE.

187. TRACHINOTUS ARGENTEUS Cuvier & Valenciennes.

Silvery pompano.

Cuvier & Valenciennes, Hist. nat. poissons, 1831, vol. 8, p. 413. "NEW YORK AND RIO JANEIRO." Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 944.

MASS.— Woods Hole (Smith 1898).

188. TRACHINOTUS CAROLINUS (Linné).

Pompano.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 944; 1900, pt. 4, pl. 147, fig. 398.

Gasterosteus carolinus Linné, Syst. nat., ed. 12, 1766, vol. 1, pt. 1, p. 490. "IN CAROLINA."

MASS.— Woods Hole (Baird 1873; Bean 1880 and Smith 1898); Nantucket (Sharp & Fowler 1904).

R. I.— Noank (B. S. N. H., Hyatt & Rathbun coll.).

POMATOMIDAE.

189. POMATOMUS SALTATRIX (Linné).

Bluefish; Horse-mackerel.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 946; 1900, pt. 4, pl. 148, fig. 400.

Perca saltatrix Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 293. "CAROLINA."

Temnodon saltator Cuv. Storer, Mem. Amer. acad., 1853, vol. 5, p. 159, pl. 15, fig. 1.

ME.— Casco Bay (U. S. nat. mus. 1873); Portland; Booth Bay; Kennebec River (Boardman & Atkins 1875); off Seguin (U. S. nat. mus. 1879); Small Point, Casco Bay (Kendall coll. 1896); Harraseeket River, Casco Bay, [young] (Smith 1902).

POMATOMIDAE.

MASS.— New Bedford, and Holmes Hole (Storer 1839); Lynn (Storer 1842f); Nahant (Jackson 1847); Buzzards Bay; Vineyard Sound; Nantucket; Massachusetts Bay (Storer 1853); Waquoit (Lyman 1872); Hingham (B. S. N. H.); Menemsha Bight (Bean 1880); Woods Hole (Baird 1873; Bean 1880 and Smith 1898); Muskeget River; Great Point Rip and Bass Rip; off Sankaty Head (Sharp & Fowler 1904).

R. I.— Narragansett Bay (R. I. fish comm. 1899) Newport (Tracy 1906).

CONN.— "Very common" (Linsley 1844); Noank (Bean 1880); off Branford Beacon (Kendall coll. 1892).

RACHYCENTRIDAE.

190. RACHYCENTRON CANADUS (Linné).

Crabeater; Bonito.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 948; 1900, pt. 4, pl. 148, fig. 401.

Gasterosteus canadus Linné, Syst. nat., ed. 12, 1766, vol. 1, p. 491. "IN CAROLINA."

MASS.— Woods Hole (Baird 1873); Buzzards Bay (Smith 1898).

CONN.— Mouth of the Housatonic (Linsley 1844).

CORYPHAENIDAE.

191. CORYPHAENA HIPPURUS Linné.

Dolphin.

Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 261. "IN PELAGO." Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 952; 1900, pt. 4, pl. 149, fig. 402.

MASS.— Vineyard Sound (Smith 1898).

CONN.— Noank (Goode 1879).

LAMPRIDAE.

192. LAMPRIS REGIUS (Bonnaterre).

Moonfish.

Goode & Bean Oceanic ichth., 1896, p. 223, fig.

Zeus regius Bonnaterre, Ichth., 1788, p. 72, pl. 39, fig. 155.

Lampris luna (Gmelin). Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 954.

ME.— (Goode & Bean 1896).

CENTROLOPHIDAE.

193. CENTROLOPHUS NIGER (Gmelin).

Blackfish; Black ruff.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 963; 1900, pt. 4, pl. 149, fig. 403.

Perca nigra Gmelin, Syst. nat., 1788, vol. 1, p. 1321. "CORNWALL."

MASS.— Dennis (Smith 1898).

194. PALINURICHTHYS PERCIFORMIS (Mitchill).

Rudderfish.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 964.

Coryphaena perciformis Mitchill, Amer. month. mag. & crit. rev., 1818, vol. 2, p. 244. "NEW YORK HARBOR." [?]

Palinurus perciformis DeKay. Storer, Mem. Amer. acad., 1853, vol. 5, p. 152, pl. 13, fig. 3.

ME.— (Gill 1873; Jordan & Evermann 1896).

MASS.—Holmes Hole (Storer 1842); Boston Harbor (Storer 1846); Holmes Hole; Boston (Storer 1853); Gay Head (B. S.

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N. H., Crosby coll.); Salem (Goode & Bean 1879); off Nomans Land; Marthas Vineyard (Goode 1879); Gloucester (Bean 1880); Woods Hole (Baird 1873; Bean 1880 and Smith 1898); Annisquam (B. S. N. H., 1880); Nantucket (Sharpe & Fowler 1904).

STROMATEIDAE.

195. GOBIOMORUS GRONOVII (Gmelin).

Portuguese Man of War Fish.

Gobius gronovii Gmelin, Syst. nat., 1788, vol. 1, p. 1205. "TROPICAL AMERICA."

Nomeus gronovii (Gmelin). Goode & Bean, Oceanic ichth., 1896, p. 220, pl. 63, fig. 227. Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 949.

MASS.— Woods Hole (Smith 1898).

R. I.— Narragansett Bay (R. I. fish comm. 1899).

196. PEPRILUS PARU (Linné).

Harvest fish; Pappyfish; Starfish.

Stromateus paru Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 248. "IN AMERICA."

Rhombus paru Linné. Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 965; 1900, pt. 4, pl. 150, fig. 404.

MASS.— Woods Hole (Smith 1898); Monomoy (Kendall coll. 1896).

R. I.— Narragansett Bay (R. I. fish comm. 1899).

197. PORONOTUS TRIACANTHUS (Peck).

Butterfish; Dollarfish; Skip jack; Sheepshead.

Stromateus triacanthus Peck, Mem. Amer. acad., 1804, vol. 2, p. 48, pl. 2, fig. 2. "PISCATAQUA RIVER, N. H."

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Rhombus triacanthus DeKay. Storer, Mem. Amer. acad., 1853, vol. 5, p. 162, pl. 15, fig. 4.

Rhombus triacanthus (Peck). Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 967; 1900, pt. 4, pl. 151, fig. 405.

Me.— Eastport (U. S. nat. mus. 1872 and Bean 1880); off Seguin (U. S. nat. mus. 1879); Casco Bay (U. S. nat. mus. 1887 and Bean 1880); Small Point, Casco Bay (Kendall coll. 1896).

N. H.— Piscataqua River (Peck 1804).

Mass.— Provincetown; Boston (Storer 1853); Massachusetts Bay (B. S. N. H., Putnam coll.); Waquoit (Lyman 1872); Salem Harbor (Goode & Bean 1879); Woods Hole; Gloucester (Bean 1880); North Truro; Monomoy; Menemsha Bight (Kendall coll. 1896); Woods Hole (Baird 1873 and Smith 1898); Naushon (Smith 1898); Nantucket (Sharp & Fowler 1904).

R. I.— Narragansett Bay (R. I. Fish Comm. 1899).

Conn.— Stratford (Linsley 1844); Noank (Bean 1880); off Stratford (Kendall coll. 1890); off Faulkners Island; off Branford Beacon (Kendall coll. 1892).

TETRAGONURIDAE.

198. Tetragonurus cuvieri Risso.

Squaretail.

Risso, Ichthyol. Nice, 1810, p. 387. "Nice." Jordan & Evermann; Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 976; 1900, pt. 4, pl. 152, fig. 411.

Mass.— Woods Hole (Goode & Bean 1896; Smith 1898).

CENTRARCHIDAE.

199. Amploplites rupestris (Rafinesque).

Rock Bass.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 990; 1900, pt. 4, pl. 156, fig. 419.

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CENTRARCHIDAE.

Bodianus rupestris Rafinesque, Amer. month. mag. & crit. rev., 1817, vol. 1, p. 120. "LAKES OF NEW YORK, VERMONT AND CANADA."

VT.— (Storer 1842); Lake Champlain (Thompson 1842); Lake Bomoseen (Evermann & Kendall 1894).

200. ENNEACANTHUS OBESUS (Girard).

Banded Sunfish.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 993.

Pomotis obesus Girard, Proc. Bost. soc. nat., 1854, vol. 5, p. 40; "FRESH WATERS ABOUT HINGHAM [MASS.] AND IN A BRANCH OF THE CHARLES RIVER AT HOLLISTON."

Bryttus obesus Girard. Storer, Mem. Amer. acad., 1867, vol. 9, p. 254.

MASS.— Hingham; Holliston (Girard 1854); Concord (Thoreau 1859; Putnam 1859); Cambridge; Malden (Storer 1867); Menhan Lake; Danvers; Beverly (Goode & Bean 1879).

201. LEPOMIS AURITUS (Linné).

Longeared Sunfish; Red Sunfish; Roach.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 1001; 1900, pt. 4, pl. 169, fig. 425.

Labrus auritus Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 283. "IN PHILADELPHIA."

Pomotis appendix DeKay. Storer, Mem. Amer. acad., 1853, vol. 5, p. 62, pl. 3, fig. 4.

ME.— Thompson Pond (Bowdoin college); Craigs Pond; Pushaw Pond; Toddy Pond; Alamoosook Lake (Merrill coll. 1899). Cobbosseecontee Lake; Lake Auburn; Ambajejus Falls;

First and Second Hurd ponds; Fourth Debsconeag Lake; Pokwokamus Deadwater, West Branch of Penobscot; Hale Pond; Bowlin Pond; Green Lake; Branch Pond; Floods Pond (Kendall coll.).

Vt.— Connecticut River at Barnet (Thompson 1842); Lake Champlain, Bridgeport (B. S. N. H., Putnam coll.).

Mass.— Concord River (Storer 1842 a, 1842 f and 1853); Ipswich River, Ipswich, (B. S. N. H.); Menham Pond and other waters in Essex County (Goode & Bean 1879).

R. I.— "Narragansett Bay (R. I. fish comm. 1899).

Conn.— Bridgeport; Hartford (Linsley 1844).

202. Eupomotis gibbosus (Linné).

Sunfish; Flatfish; Roach; Hogback; Kiver.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 1009; 1900, pt. 4, pl. 161, fig. 429.

Perca gibbosa Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 292. "in America."

Pomotis vulgaris Cuv. Storer, Mem. Amer. acad., 1853, vol. 5, p. 60, pl. 3, fig. 1.

Me.— Presumpscot River (B. S. N. H., Putnam coll.); Grand Lake Stream (U. S. nat. mus. 1877); Boyden Lake; Pennamquan Lake and River, Dennys River; Leweys Lake; St. Croix River; Maguerrowock Stream (Kendall 1894); Chickawaka Lake, Rockland (Kendall coll. 1895); Sebago and Little Sebago lakes and Songo River (Kendall coll. 1898); Androscoggin River and Lake Auburn (Merrill coll. 1899); Pettengills Pond, North Windham; Thomas Pond, South Casco; Cobbosseecontee Lake (Kendall coll. 1899).

N. H.—

Vt.— Lake Champlain (Thompson 1842) Dunmore Lake, Salisbury (B. S. N. H.).

Mass.— (Storer 1839 and 1853); pond near Plymouth (Jackson

1852); "Ponds of the County" (Putnam 1856); Quashnet River, Falmouth (Kendall coll. 1894); near Woods Hole (Smith 1898).

R. I.— "Narragansett Bay" (R. I. fish comm. 1899); Mashapaug, Benedict & Fenners ponds (Pope coll. 1894–96).

Conn.— "Common" (Linsley 1844).

203. Micropterus dolomieu Lacépède.

Smallmouth Black-bass; Black-bass.

Lacépède, Hist. nat. poissons, 1802, vol. 4, p. 325.——. Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 1011; 1900, pt. 4, pl. 162, fig. 430.

Me.— Introduced; now widely distributed in southern half of state, from Cumberland to Washington Co.

N. H.— Introduced; now widely distributed. Winnipesaukee Lake (B. S. N. H., Davidson coll.).

Vt.— Lake Champlain (Thompson 1842).

Mass.—Introduced; widely distributed. Great Sand Lake, Wareham; Massachusetts Bay (Storer 1867); Wellesley (B. S. N. H., Denton coll.); Quashnet River, Falmouth (Kendall coll. 1894).

R. I.— Introduced; now common.

Conn.— Introduced?; Housatonic (Linsley 1844).

204. Micropterus salmoides (Lacépède).

Largemouth Black-bass.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 1012; 1900, pt. 4, pl. 163, fig. 431.

Labrus salmoides Lacépède, Hist. nat. poissons, 1802, vol. 4, p. 716. "South Carolina."

Me.— Lately introduced into Lower Kimball Pond, Fryeburg and Range Ponds, Poland.

N. H.— Introduced?

Vt.— ?

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MASS.— Introduced; Quashnet River, Falmouth (Kendall coll. 1894); near Woods Hole (Smith 1898); Wellesley (B. S. N. H. Denton coll.).

R. I.— Introduced; "Narragansett Bay" (R. I. fish comm. 1899).

PERCIDAE.

205. STIZOSTEDION VITREUM (Mitchill).

Pike Perch; Wall-eyed Pike.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 1021; 1900, pt. 4, pl. 164, fig. 433.

Perca vitrea Mitchill, Amer. month. mag. & crit. rev., 1818, vol. 2, p. 247. "CAYUGA LAKE, N. Y."

VT.— Lake Champlain (Thompson 1842); Winooski and Lamoille rivers (Evermann & Kendall 1894).

206. STIZOSTEDION CANADENSE (Smith).

Sauger; Sand pike.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 1022; 1900, pt. 4, pl. 164, fig. 434.

Lucioperca canadensis C. H. Smith, Griffith's Cuvier Regne anim., 1834, vol. 10, p. 275, pl. 7. "CANADA."

VT.— Lake Champlain (Thompson 1853).

207. PERCA FLAVESCENS (Mitchill).

Perch; Yellow perch; Ring perch; Coon perch; Brindle perch.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 1023; 1900, pt. 4, pl. 165, fig. 435.

Morone flavescens Mitchill, Rept. fish. N. Y., 1814, p. 18. "NEAR NEW YORK CITY."

PERCIDAE.

Perca flacescens Cuv. Storer, Mem. Amer. acad., 1853, vol. 5, p. 52, pl. 2, fig. 1.

Me.—Thompson Pond (Bowdoin college); Grand Lake Stream; Meddybemps Lake, etc. (Kendall 1894); Songo and Presumpscot rivers; Sebago and Little Sebago lakes; Pettengill, Panther, Rattle snake, Thomas, and Hurd ponds; Cobbosseecontee and Marranocook lakes; Matagamon River and Matagamonsis Lake; Ambajejus Falls; Second and Fourth Debsconeag lakes; Pokwokamus Deadwater; Beau Lake (Kendall coll.).

N. H.— Abundant in southern half of state; Pond near Monadnock Mt. (Bigelow 1849); Lake Winnipesaukee (B. S. N. H., Putnam coll.).

Vt.— Common; Lake Champlain (Thompson 1842); Clyde River near Newport Missisquoi Bay (Evermann & Kendall 1894); Swanton (Carter coll. 1907).

Mass.—Concord River (Storer 1842c and 1842f); Fresh Pond, Cambridge (Storer 1842f); common everywhere (Storer 1853); "Ponds of the County" (Putnam 1856); Salem (Wheatland 1859); Idlewood Lake Menham (B. S. N. H., Warren coll. & Brown coll.); Orleans, Cape Cod (Davidson coll.); abundant everywhere (Goode & Bean 1879); Quashnet River, Falmouth (Kendall coll. 1894); near Woods Hole (Smith 1898).

R. I.— Benedict, Fenners, Mashapaug ponds; Pocassett River; Ponegansett Resevoir (Pope coll. 1898).

Conn.— Hockanum River, Hartford (Ayres 1843).

208. Percina caprodes (Rafinesque).

Log perch; Hogmolly.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 1026; 1900, pt. 4, pl. 165, fig. 436.

Sciena caprodes Rafinesque, Amer. month. mag. & crit. rev., 1818, vol. 1, p. 354. "Ohio River."

Vt.— Lake Champlain (Thompson 1842).

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PERCIDAE.

209. COTTOGASTER COPELANDI (Jordan).

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 1045.

Rheocrypta copelandi Jordan, Bull. 10, U. S. nat. mus., 1877, p. 9. "WHITE RIVER, INDIANA."

VT.— Lake Champlain (Thompson 1853).

210. BOLEOSOMA OLMSTEDI (Storer).

Tessellated darter.

Storer, Mem. Amer. acad., 1853, vol. 5, p. 78, pl. 4, fig. 4.

Etheostoma olmstedi Storer, Bost. journ. nat. hist., 1842 (1844), vol. 4, p. 61, pl. 5, fig. 2. "HARTFORD, CONNECTICUT."

Boleosoma nigrum olmstedi (Storer). Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 1057; 1900, pt. 4, pl. 171, fig. 451.

MASS.— "Western portion of the state" (Storer 1853); Charles River (B. S. N. H., Baird coll.) New Salem (B. S. N. H., Trask coll.); Quashnet River, Falmouth (Kendall coll. 1894); near Woods Hole (Smith 1898).

R. I.— "Narragansett Bay" (R. I. Fish Comm. 1899).

CONN.— Hartford (Storer 1842); in nearly all freshwater streams (Linsley 1844).

211. BOLEICHTHYS FUSIFORMIS (Girard).

Redside darter.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 1101; 1900, pt. 4, pl. 177, fig. 469.

Boleosoma fusiforme Girard, Proc. Bost. soc. nat. hist., 1854, vol. 5, p. 41. "CHARLES RIVER NEAR FRAMINGHAM, MASS."

Hololepis fusiformis Girard. Storer, Mem. Amer. acad., 1867, vol. 9, p. 256.

PERCIDAE.

MASS.— Charles River (Girard 1854); a small brook tributary to Melrose Pond, Melrose (B. S. N. H., Putnam coll.); Framingham; Essex County and elsewhere (Storer 1867); Brook of Melrose Pond; Menham Lake; Newhall Crossing (Goode & Bean 1879) Waltham (B. S. N. H., Warren coll.).

CHEILODIPTERIDAE.

212. APOGON IMBERBUS (Linné).

King of the mullets.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 1107.

Mullus imberbus Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 300. "IN MELITA."

R. I.— Newport (Cope 1870).

213. APOGON MACULATUS (Poey).

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 1109.

Monoprion maculatus Poey, Memorias, 1860, vol. 2, p. 123. "CUBA."

MASS.— Katama Bay (Smith 1898).

R. I.— Newport (Cope 1870).

SERRANIDAE.

214. ROCCUS LINEATUS (Bloch).

Striped bass; Rock; Rockfish.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 1132; 1900, pt. 4, pl. 180, fig. 478.

Sciaena lineata Bloch, Nat. ausl. fische, 1792, vol. 3, p. 62, pl. 304. "MEDITERRANEAN SEA."

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SERRANIDAE.

Labrax lineatus Cuv. Storer, Mem. Amer. acad., 1853, vol. 5, p. 54, pl. 1, fig. 4.

Me.— Kenduskeag (Williamson 1832); coast (B. S. N. H., Davidson coll.); Merrymeeting Bay; Saco, Kennebec, Eastern and Sebasticook rivers (Me. fish. comm. 1867); Sheepscot, Dyer, St. Croix and Piscataqua rivers; Winnegance Creek; Casco Bay (Atkins 1887). Wolfsneck, and Small Point, Casco Bay (Kendall coll. 1896).

N. H.— (Storer 1853).

Mass.— Chelsea; Nantasket; Boston (Storer 1839); Provincetown; Charles River; Buzzards Bay (Storer 1853); Massachusetts Bay (B. S. N. H., Cutting coll.); "Harbors of the County" (Putnam 1856); Waquoit (Lyman 1872); Essex County rivers (Goode & Bean 1879); Holyoke (Bean 1880); Monomoy (Kendall coll. 1896); Woods Hole (Baird 1873; Bean 1880 and Smith 1898); Nantucket (Sharp & Fowler 1904).

R. I.— Narragansett Bay (R. I. fish comm. 1899); Taunton River (Tracy 1906).

Conn.— Connecticut River to above Hartford; Stonington (Linsley 1844).

215. Morone americana (Gmelin).

White perch.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 1134; 1900, pt. 4, pl. 181, fig. 479.

Perca americana Gmelin, Syst. nat., 1788, vol. 1, p. 1308. "New York."

Labrax rufus DeKay, Storer, Mem. Amer. acad., 1853, vol. 5, p. 57, pl. 1, fig. 1.

Me.— Lakes emptying into Kennebec River as far back as Skowhegan; into Penobscot River still further north; and in lakes of the St. Croix and intervening territory (Me. fish comm. 1867);

Grand Lake Stream (U. S. nat. mus. 1877); Eastport and Freeport (Kendall coll. 1893); Sysladobsis, Big, Leweys and Meddybemps lakes (Kendall 1894); Pushaw and Cogchnewagn ponds (Merrill coll. 1899); Sebago and Little Sebago lakes (Kendall coll. 1898, 1899 and 1900); Cobbosseecontee Lake (Kendall coll. 1899); Harraseeket River (Smith 1902).

N. H.— Wheelrights Pond (N. H. fish comm. 1877).

Mass.— Mouths of rivers, and ponds near Boston (Storer 1853 "Ponds of the county and occasionally in salt water" (Putnam 1856); Woods Hole (Baird 1873); Floating Bridge Pond, Salem; Flax Pond, Lynn (Goode & Bean 1879); Idlewood Lake, Wenham (B. S. N. H., Brown coll.); Nantucket, and Brewster, Cape Cod (B. S. N. H., Ordway coll.); Fresh Pond, Cambridge (B. S. N. H., Van Vleck coll.); Buzzards Bay and Vineyard Sound (Bean 1880 and Smith 1898).

R. I.— Narragansett Bay (R. I. Fish Comm. 1899); Mashapaug and Benedict ponds (Pope coll. 1888–1896).

Conn.— Stratford (Linsley 1844); Noank (Bean 1880).

216. Epinephelus adscensionis (Osbeck).

Rock hind.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 1152; 1900, pt. 4, pl. 182, fig. 482.

Trachurus adscensionis Osbeck, Voyage to China, 1771, vol. 2, p. 95. "Ascension Island."

Mass.— Katama Bay [young] (Smith 1900).

217. Epinephelus niveatus (Cuvier & Valenciennes).

Spotted grouper; Snowy grouper.

Boulenger, Cat. fish. Brit. mus., ed. 2, 1895, p. 226, pl. 3, fig. 3. Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 1156.

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SERRANIDAE.

Serranus niveatus Cuv. & Val., hist. nat. poissons, 1828, vol. 2, p. 380. "BRAZIL."

MASS.— Woods Hole (Smith & Kendall 1894; Smith 1898).

R. I.— Newport (Gill 1861 and Cope 1870); Tiverton; Point Judith (U. S. nat. mus.——); Narragansett Bay (R. I. fish comm. 1899).

218. EPINEPHELUS MORIO (Cuvier & Valenciennes).

Red grouper.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 1160; 1900, pt. 4, pl. 184, fig. 485.

Serranus morio Cuv. & Val., Hist. nat. poissons, 1828, vol. 2, p. 285. "NEW YORK AND SAN DOMINGO."

MASS.— Katama Bay [young] (Smith 1898).

219. GARRUPA NIGRITA (Holbrook).

Black Grouper.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 1161; 1900, pt. 4, pl. 184, fig. 486.

Serranus nigritus Holbrook, Ichth. South Carolina, 1856, p. 173, pl. 25, fig. 11. "CHARLESTON, S. C."

MASS.— Katama Bay [young] (Smith 1900).

220. MYCTEROPERCA BONACI (Poey).

Black Grouper.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 1174; 1900, pt. 4, pl. 187, fig. 492.

Serranus bonaci Poey, Memorias, 1860, vol. 2, p. 129. "CUBA."

MASS.— Katama Bay [young] (Smith 1900).

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SERRANIDAE.

221. MYCTEROPERCA INTERSTITIALIS (Poey).

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 1178.

Serranus interstitialis Poey, Memorias, 1860, vol. 2, p. 127. "CUBA."

MASS.— Katama Bay [?] (Smith 1900).

222. CENTROPRISTES STRIATUS (Linné).

Sea Bass; Black Sea Bass.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 1199; 1900, pt. 4, pl. 190, fig. 500.

Labrus striatus Linné, Syst. nat., 1758, ed. 10, vol. 1, p. 285. "IN AMERICA."

Centropristes varius Storer. Storer, Mem. Amer. acad., 1853, vol. 5, p. 58, pl. 2, fig. 4.

ME.— Matinicus Island (B. S. N. H., Arethusa coll.); Wood Island, Casco Bay (Smith & Kendall 1896).

MASS.— Holmes Hole (Storer 1839); Holmes Hole; Gay Head; New Bedford; Massachusetts Bay; Nahant (Storer 1853); Salem Harbor; Nahant (Putnam 1856); Beverly Bar (Wheatland 1860); Cohasset Narrows (Bean 1880); Waquoit (Lyman 1872); Nantucket Sound; Buzzards Bay (Collins & Rathbun 1887); North Truro; Monomoy; Menemsha Bight (Kendall coll. 1896); Woods Hole (Baird 1873; Bean 1880 and Smith 1898); Nantucket (Sharp & Fowler 1904).

R. I.— Narragansett Bay (R. I. fish comm. 1899).

CONN.— Noank (Bean 1880); off Bridgeport; off Stratford; the Middle Ground (Kendall coll. 1890); off Faulkners Island (Kendall coll. 1892).

SERRANIDAE.

223. Rypticus bistrispinus (Mitchill).

Soapfish.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 1233; 1900, pt. 4, pl. 194, fig. 509.

Bodianus bistrispinus Mitchill, Amer. month. mag. & crit. rev., 1818, vol. 2, p. 247. "Straits of Bahama."

R. I.— Newport (Cope, 1870).

LOBOTIDAE.

224. Lobotes surinamensis (Bloch).

Flasher; Trippletail.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 1235; 1900, pt. 4, pl. 194, fig. 510.

Holocentrus surinamensis Bloch, Nat. ausl. fische, 1790, vol. 3, p. 98, pl. 243. "Surinam."

Mass.— Woods Hole (Baird 1873 and Smith 1898); Menemsha Bight (Smith 1898).

R. I.— Narragansett Bay; off Pine Hill (R. I. fish comm. 1899); Prudence Island (Sherwood & Edwards 1901); near Saunderstown (Tracy 1906).

PRIACANTHIDAE.

225. Priacanthus arenatus Cuvier & Valenciennes.

Catalufa; Bigeye.

Cuv. & Val., Hist. nat. poissons, 1829, vol. 3, p. 101. "Brazil." Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 1237; 1900, pt. 4, pl. 195, fig. 511.

Mass.— Woods Hole; Quisset Harbor (Smith 1898).

R. I.— Newport (Jordan & Evermann 1896).

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LOBOTIDAE.

226. PSEUDOPRIACANTHUS ALTUS (Gill).

Bigeye.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 1, p. 1239; 1900, pt. 4, pl. 195, fig. 512.

Priacanthus altus Gill, Proc. acad. nat. sci. Phil., 1862, p. 132, "NARRAGANSETT BAY AT CANANICUT FERRY, R. I." Storer, Mem. Amer. acad., 1867, vol. 9, p. 254.

MASS.— Marblehead Beach (Storer 1867); Woods Hole; Acushnet River, New Bedford [young] (Smith 1898).

R. I.— Cananicut Ferry (Gill 1862); Newport (Cope 1870).

LUTIANIDAE.

227. LUTIANUS GRISEUS (Linné).

Gray snapper; Mangrove snapper.

Labrus griseus Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 283. "IN AMERICA."

Neomaenis griseus (Linné). Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 1255.

MASS.— Woods Hole [young] (Smith 1898).

R. I.— Newport (Tracy 1906).

228. LUTIANUS JOCU (Bloch & Schneider).

Dog snapper.

Anthias jocu Bloch & Schn., Syst. ichth., 1801, p. 310. "CUBA."

Neomaenis jocu (Bloch & Schn). Jordan & Evermann, Bull. U. S. nat. mus. 1898, pt. 2, p. 1257.

MASS.— Woods Hole [young] (Smith 1898).

229. LUTIANUS APODUS (Walbaum).

Schoolmaster.

? *Perca apodus* Walbaum, Artedi Pisc., 1792, p. 351. "BAHAMAS."

LUTIANIDAE.

Neomaenis apodus (Walbaum). Jordan & Evermann, Bull. 47, U. S. nat. mus. 1898, pt. 2, p. 1258; 1900, pt. 4, pl. 197, fig. 515.

MASS.— Woods Hole, [young] (Smith 1898).

230. LUTIANUS BLACKFORDII Goode & Bean.

Red snapper.

Goode & Bean, Proc. U. S. nat. mus., 1878, vol. 1, p. 176. "PENSACOLA, FLA."

Neomaenis aya (Bloch). Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 1264; 1900, pt. 4, pl. 197, fig. 516.

MASS.— Menemsha Bight [young] (Smith 1898).

231. LUTIANUS ANALIS (Cuvier & Valenciennes).

Muttonfish.

Mesoprion analis Cuv. & Val., Hist. nat. poiss., 1828, vol. 2, p. 452. "SANTO DOMINGO."

Neomaenis analis (Cuv. & Val.). Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 1265; 1900, pt. 4, pl. 198, fig. 517.

MASS.— Woods Hole [young] (Smith 1898).

232. OCYURUS CHRYSURUS (Bloch).

Yellowtail.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 1275; 1900, pt. 4, pl. 199, fig. 520.

Sparus chrysurus Bloch, Ichth. Nat. ausl. fische, 1790, vol. 3, p. 28, pl. 262. "BRAZIL."

MASS.— Katama Bay [young] (Smith 1901).

SPARIDAE.

233. STENOTOMUS CHRYSOPS (Linné).

Scup; Porgy.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 1346; 1900, pt. 4, pl. 211, fig. 544.

Sparus chrysops Linné, Syst. nat., ed. 12, 1766, vol. 1, pt. 1, p. 471. "IN CAROLINA."

Pagrus argyrops Cuv. Storer, Mem. Amer. acad., 1853, vol. 5, p. 127, pl. 10, fig. 4.

ME.— Eastport (U. S. nat. mus., 1872); Casco Bay (Smith & Kendall 1896).

MASS.— Buzzards Bay; Vineyard Sound; Holmes Hole; Wellfleet; Sandwich; Boston; Nahant (Storer 1839 and 1853); Waquoit (Lyman 1872); Swampscot (B. S. N. H., Phillips coll.); Buzzards Bay (B. S. N. H., Davidson coll.); Nantucket Sound; Buzzards Bay (Collins & Rathbun 1887); Milk Island (Goode & Bean 1879; Cohasset Narrows (Bean 1880); Thatchers Island (Goode 1884); North Truro; Monomoy; Menemsha Bight (Kendall coll. 1896); Woods Hole (Baird 1873; Bean 1880 and Smith 1898); Nantucket (Sharp and Fowler 1904).

R. I.— Narragansett Bay (R. I. fish comm. 1899 and Pope coll.); Taunton River; Newport; Block Island (Tracy 1906).

CONN.— Bridgeport; New Haven (Linsley 1844); off Bridgeport; off Stratford; Middleground (Kendall coll. 1890); off Faulkners Island (Kendall coll. 1892).

234. LAGODON RHOMBOIDES (Linné).

Pinfish; Sailors choice; Bream.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 1358; 1900, pt. 4, pl. 215, fig. 552.

Sparus rhomboides Linné, Syst. nat., ed. 12, 1766, vol. 1, pt. 1, p. 470. "IN AMERICA."

MASS.— Woods Hole (Smith 1898).

SPARIDAE.

R. I.— Narragansett Bay (R. I. Fish Comm. 1899); Newport (Tracy 1906).

235. ARCHOSARGUS PROBATOCEPHALUS (Walbaum).

Sheepshead.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 1361; 1900, pt. 4, pl. 216, fig. 554.

Sparus probatocephalus Walbaum, Artedi Pisc., 1792, p. 295. "NEW YORK."

Sargus ovis Cuv. Storer, Mem. Amer. acad., 1853, vol. 5, p. 126, pl. 10, fig. 1.

MASS.— South of Cape Cod (Storer 1839 and 1853); Vineyard Sound (Smith 1898); Woods Hole (B. S. N. H., Denton coll.).

R. I.— Narragansett Bay (R. I. fish comm. 1899); Newport (Tracy 1906).

CONN.— Stratford (Linsley 1844).

GERRIDAE.

236. EUCINOSTOMUS GULA (Cuvier & Valenciennes).

Silver jenny.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 464. 1370.

Gerres gula Cuv. & Val., Hist. nat. poissons, 1830, vol. 6, p. 464. "MARTINIQUE."

MASS.— Woods Hole [young] (Smith 1898).

KYPHOSIDAE.

237. KYPHOSUS SECTATRIX (Linné).

Chub; Sailors choice.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 1387; 1900, pt. 4, pl. 219, fig. 559.

TELEOSTOMI. ACANTHOPTERI.

KYPHOSIDAE.

Perca sectatrix Linné, Syst. nat., ed. 12, 1766, vol. 1, p. 486. "IN AMERICA."

MASS.— Woods Hole (Baird 1873 and Smith 1898).
R. I.— Newport (Goode 1879).

SCIAENIDAE.

238. CYNOSCION REGALIS (Bloch & Schneider).

Weakfish; Squeteagne; Sea trout.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 1407; 1900, pt. 4, pl. 220, fig. 562.

Johnius regalis Bloch & Schn., Syst. ichth., 1801, p. 75. "NEW YORK."

Otolithus regalis Cuv. Storer, Mem. Amer. acad., 1853, vol. 5, p. 122, pl. 9, fig. 1.

ME.— (Holmes 1862).

MASS.— Massachusetts Bay (B. S. N. H., Storer coll.); Nantucket; Marthas Vineyard; Provincetown (Storer 1839 and 1853); Waquoit (Lyman 1872); Milk Island, Cape Ann (Goode & Bean 1879); Woods Hole (Baird 1873 and Bean 1880); Monomoy; Menemsha Bight (Kendall coll. 1896); Buzzards Bay (Smith 1898); Nantucket (Sharp and Fowler 1900).

R. I.— Narragansett Bay (R. I. fish comm. 1899); Conimicut (Pope coll. 1894–99); Providence River; off Block Island (Tracy 1906).

CONN.— Mouth of Housatonic (Linsley 1844); off Bridgeport; off Stratford; Middle Ground [young] (Kendall coll. 1890); off Norwalk Light House; off Branford Beacon (Kendall coll. 1892).

SCIAENIDAE.

239. LARIMUS FASCIATUS Holbrook.

Holbrook, Ichth. South Carolina, 1856, p. 153, pl. 22, fig. 1.

SCIAENIDAE.

"CHARLESTON." Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 1424.

MASS.— Buzzards Bay (Smith 1898).

240. SCIAENOPS OCELLATUS (Linné).

Red drum; Channel bass.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 1453; 1900, pt. 4, pl. 222, fig. 567.

Perca ocellata Linné, Syst. nat., ed. 12, 1766, vol. 1, p. 483. "IN CAROLINA."

MASS.— Buzzards Bay (Smith 1898).

241. LEIOSTOMUS XANTHURUS Lacépède.

Spot.

Lacépède, Hist. nat. poissons, 1802, vol. 4, p. 439, pl. 10, fig. 00· "CAROLINA." Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 1458; 1900, pt. 4, pl. 223, fig. 569.

MASS.— Woods Hole (Baird 1873; Bean 1880 and Smith 1898).

R. I.— Narragansett Bay (R. I. fish comm. 1899); Newport (Tracy 1906).

CONN.— Branford (Linsley 1844).

242. MICROPOGON UNDULATUS (Linné).

Croaker.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 1461; 1900, pt. 4, pl. 224, fig. 570.

Perca undulata Linné, Syst. nat., ed. 12, 1766, vol. 1, p. 483. "IN CAROLINA."

MASS.— Buzzards Bay (Smith 1898).

SCIAENIDAE.

243. MENTICIRRHUS SAXATILIS (Bloch & Schneider).

Kingfish; Whiting; Sea mullet.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 1475.

Johnius saxatilis Bloch & Schn., Syst. ichth., 1801, p. 75. "NEW YORK."

Umbrina nebulosa Storer. Storer, Mem. Amer. acad., 1853, vol. 5, p. 124, pl. 9, fig. 4.

ME.— Casco Bay (Lee 1885 and Bowdoin college).

MASS.— Nahant; Lynn (Storer 1842); Boston Light House; Lynn; Provincetown (Storer 1853); Waquoit (Lyman 1872); Marblehead Light; Spite Bridge, Danvers (Goode & Bean 1879); Cohasset Narrows (Bean 1880); North Truro; Monomoy (Kendall coll. 1896); Woods Hole (Baird 1873; Bean 1880 and Smith 1898); Nantucket (Sharpe & Fowler 1904).

R. I.— Narragansett Bay (R. I. fish comm. 1899).

CONN.— Stratford (Linsley 1844); Noank (Bean 1880).

244. POGONIAS CROMIS (Linné).

Drum; Black drum.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 1482; 1900, pt. 4, pl. 225, fig. 573.

Labrus cromis Linné, Syst., nat., ed. 12, 1766, vol. 1, p. 479. "IN CAROLINA."

MASS.— Provincetown (Goode & Bean 1879; Mystic River (B. S. N. H., Cutter coll.); Woods Hole (Smith 1898).

R. I.— Narragansett Bay (R. I. fish comm. 1899).

CONN.— Stratford (Linsley 1844).

245. APLODONOTUS GRUNNIENS Rafinesque.

Freshwater drum; Sheepshead.

Rafinesque, Journ. de phys., 1819, p. 88. "OHIO RIVER."

SCIAENIDAE.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 1484; 1900, pt. 4, pl. 226, pl. 574.

VT.— (Storer 1842); Lake Champlain (Thompson 1842).

POMACENTRIDAE.

246. EUPOMACENTRUS LEUCOSTICTUS (Müller & Troschel).

Cocky pilot.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 1555.

Pomacentrus leucostictus Müller & Trosch., Schomburgk's Hist. Barbados, 1848, p. 674. "BARBADOS."

MASS.— Katama Bay (Smith 1900).

247. ABUDEFDUF SAXATILIS (Linné).

Cocky pilot.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 1561; 1900, pt. 4, pl. 234, fig. 590.

Chaetodon saxatilis Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 276. "IN INDIA."

R. I.— Newport (Cope 1870).

LABRIDAE.

248. TAUTOGOLABRUS ADSPERSUS (Walbaum).

Chogset; Cunner; Nipper; Wharffish.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 1577; 1900, pt. 4, pl. 236, fig. 505.

Labrus adspersus Walbaum, Artedi Pisc., 1792, p. 254. "NEW YORK."

LABRIDAE.

Ctenolabrus ceruleus DeKay. Storer, Mem. Amer. acad., 1855, vol. 5, p. 274, pl. 21, fig. 1.

ME.— Casco Bay (U. S. nat. mus. 1873; Lee 1885; Kendall coll. 1892, 1896; 1898; 1900, 1902; 1903); Portland (Bean 1880).

MASS.— Entire coast (Storer 1839 and 1855); Massachusetts Bay (B. S. N. H., Storer coll.); Annisquam (B. S. N. H., Arethusa coll.); Orleans, Cape Cod (B. S. N. H., Davidson coll.); Waquoit (Lyman 1872); Salem (Goode & Bean 1879); Provincetown (Bean 1880); Gloucester (Bean 1880 and Kendall coll. 1896); Woods Hole (Baird 1873; Bean 1880 and Smith 1898); Gay Head; Cuttyhunk (Smith 1898); Nantucket (Sharp & Fowler 1904).

R. I.— Narragansett Bay (R. I. fish comm. 1899); Conimicut (Pope coll. 1894–99).

CONN.— "Common" (Linsley 1844); Noank (Bean 1880); off Stratford (Kendall coll. 1890); off Faulkners Island (Kendall coll. 1892).

249. TAUTOGA ONITIS (Linné).

Tautog; Blackfish.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 1578; 1900, pt. 4, pl. 237, fig. 596.

Labrus onitis Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 286.

Tautoga americana DeKay. Storer, Mem. Amer. acad., 1855, vol. 5, p. 276, pl. 20, fig. 2.

ME.— Casco Bay (Lee 1885); Small Point, Casco Bay (Kendall coll. 1896); Orrs Island, Casco Bay (Kendall coll. 1900); mouth Harraseeket River (Kendall coll. 1901); Freeport (Kendall coll. 1903); Penobscot River and Bay (Evermann 1903).

MASS.— Plymouth; Nahant; Lynn; Boston; Wellfleet; Rochester Harbor (Storer 1855); Waquoit (Lyman 1872); Massa-

chusetts Bay (Bean 1880); Gloucester (B. S. N. H., Davidson coll.); Nantucket Sound; Vineyard Sound; Buzzards Bay (Collins & Rathbun 1887); Monomoy; Menemsha Bight (Kendall coll. 1896); Woods Hole (Baird 1873; Bean 1880 and Smith 1898); Nantucket (Sharp & Fowler 1904).

R. I.— Narragansett Bay (R. I. fish comm. 1899); off Conimicut Light (Pope coll. 1897–99); Pawtucket (Tracy 1906).

CONN.— Middle Ground; off Stratford; off Bridgeport; Stonington (Linsley 1844); Noank (Bean 1880).

SCARIDAE.

250. SPARISOMA FLAVESCENS (Bloch & Schneider).

Mud parrot.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 1639.

Scarus flavescens Bloch & Schn., Syst. ichth., 1801, p. 290. "CUBA."

MASS.— Woods Hole (Smith 1901).

251. SCARUS CROICENSIS Bloch.

Bullon.

Bloch, Nat. ausl. fische, vol. 3, p. 27, 1790, pl. 221. "ST. CROIX." Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 1650.

MASS.— Katama Bay (Smith 1901).

ZEIDAE.

252. ZENOPSIS OCELLATUS (Storer).

John dory.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 1660; 1900, pt. 4, pl. 246, fig. 618.

TELEOSTOMI. ACANTHOPTERI.

ZEIDAE.

Zeus ocellatus Storer, Proc. Bost. soc. nat. hist., 1858, vol. 6, p. 386. "PROVINCETOWN, MASS."

MASS.— Provincetown (Storer 1858a).

EPHIPPIDAE.

253. CHAETODIPTERUS FABER (Broussonet).

Spadefish; Porgy.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 1668; 1900, pt. 4, pl. 247, fig. 619.

Chaetodon faber Broussonet, Ichth., 1782, pt. 5, pl. 4. "JAMAICA."

MASS.— Woods Hole (Smith 1898).

R. I.— Narragansett Bay (Tracy 1906).

CHAETODONTIDAE.

254. CHAETODON OCELLATUS Bloch.

Butterflyfish.

Bloch. Nat. ausl. fische, 1787, vol. 2, p. 105, pl. 211, fig. 2.——. Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 1674; 1900, pt. 4, pl. 249, fig. 621.

MASS.— Woods Hole (Smith 1898).

R. I.— Newport (Gill 1861 and Cope 1870).

255. CHAETODON CAPISTRATUS Linné.

Butterfly.

Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 1758. "IN INDIIS." Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 1677; 1900, pt. 4, pl. 250, fig. 622.

MASS.— Woods Hole; Quisset Harbor (Smith 1898); Katama Bay (Smith 1901).

TEUTHIDIDAE.

256. TEUTHIS CAERULEUS (Bloch & Schneider).

Blue tang.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 1691.

Acanthurus caeruleus Bloch & Schn., Syst. ichth., 1801, p. 214. "CAROLINA; HAVANA."

MASS.— Katama Bay [young], (Smith 1900).

257. TEUTHIS HEPATUS Linné.

Tang.

Linné, Syst. nat., ed. 12, 1766, vol. 1, p. 507. "IN CAROLINA, AMBOINA." Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 1991.

MASS.— Katama Bay [young] (Smith 1900).

258. TEUTHIS BAHIANUS (Castelnau).

Ocean tang.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 1693; 1900, pt. 4, pl. 256, fig. 629.

Acanthurus bahianus Castelnau, Anim. nouv. ou rares de l'Amer. du Sud, 1855, p. 241, pl. 11, fig. 1. "BAHIA."

MASS.— Katama Bay [young], (Smith 1900).

BALISTIDAE.

259. BALISTES CAROLINENSIS Gmelin.

Triggerfish.

Gmelin, Syst. nat., 1788, vol. 1, p. 1468. "CAROLINA." Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 1701; 1900, pt. 4, pl. 258, fig. 632.

TELEOSTOMI. ACANTHOPTERI.

BALISTIDAE.

MASS.— Squam River, Annisquam (B. S. N. H., Hyatt coll.); New Bedford (Luce 1883); Woods Hole (Smith 1898).

R. I.—Newport (Bean 1880); Narragansett Bay (R. I. fish comm. 1899); Wickford (B. S. N. H., Lewis coll.); West Passage; Connanicut Island (Tracy 1906).

260. BALISTES FORCIPATUS Gmelin.

Triggerfish.

Gmelin, Syst. nat., 1788, vol. 1, p. 1472. "BRAZIL." Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 1702.

R. I.— Newport (Cope 1870); Narragansett Bay (R. I. fish comm. 1899).

261. BALISTES VETULA Linné.

Oldwife; Bessy corker.

Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 329. "IN INSULAM ASCENSIONIS." Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 1703.

MASS.— Woods Hole (Baird 1873 and Smith 1898 [young]); Nantucket (Sharp & Fowler 1904).

262. CANTHIDERMIS SOBACO Poey.

Sabaco.

Poey, Memorias, 1860, vol. 2, p. 324. "HAVANA." Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 1705.

MASS.— Vineyard Sound (Smith 1898).

MONACANTHIDAE.

263. MONACANTHUS CILIATUS (Mitchill).

Filefish.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 1714; 1900, pt. 4, pl. 259, fig. 634.

MONACANTHIDAE.

Balistes ciliatus Mitchill, Amer. month. mag. & crit. rev., 1818, vol. 2, p. 326. "BAHAMA STRAITS."

Monacanthus massachusettensis Storer. Storer, Mem. Amer. acad., 1863, vol. 8, p. 425, pl. 34, fig. 4.

MASS.— Massachusetts Bay (Storer 1839 and 1863).

264. MONACANTHUS HISPIDUS (Linné).

Filefish.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 1715; 1900, pt. 4, pl. 259, fig. 635.

Balistes hispidus Linné, Syst. nat., ed. 12, 1766, vol. 1, p. 405. "CAROLINA."

Monacanthus signifer Storer. Storer, Mem. Amer. acad., 1863, vol. 8, p. 426, pl. 35, fig. 1.

MASS.— Lynn and Nantucket (Storer 1843a); Hingham; Lynn; Nahant; Boston Harbor (Storer 1863); Marthas Vineyard (B. S. N. H., Hyatt coll.); Cape Cod (Goode 1879); Woods Hole (Baird 1873; Bean 1880 and Smith 1898).

R. I.— Newport (Bean 1880); Narragansett Bay (R. I. fish comm. 1899).

CONN.— Stonington (Linsley 1844).

265. ALUTERA SCHOEPFII (Walbaum).

Foolfish; Turbot; Hogfish.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 1718; 1900, pt. 4, pl. 260, fig. 636.

Balistes schoepfii Walbaum, Artedi Pisc., 1792, p. 461. "LONG ISLAND."

Monacanthus auranticus DeKay. Storer, Mem. Amer. acad., 1863, vol. 8, p. 423, pl. 34, fig. 3.

ME.— Portland (Storer 1845, 1848 and 1863).

MASS.— Holmes Hole (Storer 1839); Salem (Storer 1845, and

1863); Forest River Lead Works, Salem (Wheatland 1852 and Goode & Bean 1879); Menemsha Bight (Bean 1880); Woods Hole (Baird 1873; Bean 1880 and Smith 1898).

R. I.— Newport (Bean 1880); Goose Neck (Tracy 1906).

CONN.— Long Island Sound; Stratford; Stonington (Linsley 1844).

266. ALUTERA MONOCEROS (Linné).

Liza barbula.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 1720. Smith, Bull. U. S. fish comm., 1899, vol. 18, p. 273, pl. 64.

Balistes monoceros Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 327. "ASIA."

MASS.— Woods Hole (Smith 1899).

OSTRACIIDAE.

267. LACTOPHRYS TRIQUETER (Linné).

Rock shellfish; Trunkfish.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 1722; 1900, pt. 4, pl. 261, fig. 638.

Ostracion triqueter Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 330. "IN INDIA."

MASS.— Katama Bay (Smith 1900).

268. LACTOPHRYS TRIGONUS (Linné).

Trunkfish; Shellfish.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 1723; 1900, pt. 4, pl. 263, fig. 641.

Ostracion trigonus Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 330. "IN INDIA."

OSTRACIIDAE.

Lactophrys yalei DeKay. Storer, Mem. Amer. acad., 1863, vol. 8, p. 429, pl. 35, fig. 3.

MASS.— Marthas Vineyard (Storer 1837, 1839, 1863); Holmes Hole (B. S. N. H.); Woods Hole (Smith 1898).

R. I.— Narragansett Bay (R. I. fish comm. 1899).

269. LACTOPHRYS TRICORNIS (Linné).

Cowfish; Toro.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 1724; 1900, pt. 4, pl. 261, fig. 639.

Ostracion tricornis Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 331. "IN INDIA."

MASS.— Katama Bay (Smith 1900).

TETRAODONTIDAE.

270. LAGOCEPHALUS LAEVIGATUS Linné.

Rabbitfish.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 1728; 1900, pt. 4, pl. 268, fig. 642.

Tetrodon laevigatus Linné, Syst. nat., ed. 12, 1766, vol. 1, p. 411. "IN CAROLINA." Storer, Mem. Amer. acad. 1863, vol. 8, p. 418, pl. 39, fig. 1.

MASS.— Nantucket (Storer 1842 and 1842); Woods Hole (Baird 1873); Buzzards Bay (Smith 1898; Vineyard Sound (Smith 1898).

R. I.— Narragansett Bay; Tiverton; Newport (R. I. fish comm. 1899).

CONN.— Long Island Sound (Linsley 1844).

TELEOSTOMI. ACANTHOPTERI.

TETRAODONTIDAE.

271. SPHEROIDES SPENGLERI (Bloch).

Swelltoad; Tambor.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 1732; 1900, pt. 4, pl. 264, fig. 644.

Tetrodon spengleri Bloch, Nat. ausl. fische, 1785, vol. 2, p. 135, pl. 144. "EAST INDIES."

MASS.— Woods Hole (Smith 1898).

272. SPHEROIDES MACULATUS (Bloch & Schneider).

Swellfish; Puffer; Swelltoad; Baloonfish; Bellowsfish.

Jordan & Evermann Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 1733; 1900, pt. 4, pl. 264, fig. 645.

Tetrodon hispidus var. *maculatus* Bloch & Schn., Syst. ichth., 1801, p. 504. "LONG ISLAND."

Tetraodon turgidus Mitchill. Storer, Mem. Amer. acad. 1863, vol. 8, p. 417, pl. 33, fig. 5.

ME.— Small Point, Casco Bay (Smith & Kendall 1896).

MASS.— Boston, Holmes Hole (Storer 1839); Nahant; Manemsha Creek (Storer 1863); Massachusetts Bay (B. S. N. H., Storer coll.); Salem Harbor (Wheatland 1852); Provincetown (Goode & Bean 1879); Cohasset Narrows (Bean 1880); North Truro; Monomoy (Kendall coll. 1896); Woods Hole (Baird 1873; Bean 1880 and Smith 1898); Nantucket (Sharp & Fowler 1904).

R. I.— Narragansett Bay (R. I. fish comm. 1899).

CONN.— "Very common" (Linsley 1844); Noank (Bean 1880); off Branford Beacon (Kendall coll. 1892).

273. SPHEROIDES TESTUDINEUS (Linné).

Tambor; Globefish.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 1734; 1900, pt. 4, pl. 265, fig. 646.

TELEOSTOMI. ACANTHOPTERI.

TETRAODONTIDAE.

Tetraodon testudineus Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 332. "IN INDIA."

R. I.— Newport (Cope 1870; Jordan & Evermann 1898).

274. SPHEROIDES TRICHOCEPHALUS (Cope).

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 1737.

Tetraodon trichocephalus Cope, Proc. acad. nat. sci. Phil., 1870, p. 120. "NEWPORT, R. I."

R. I.— Newport [?] (Cope 1870).

DIODONTIDAE.

275. DIODON HYSTRIX Linné.

Porcupinefish.

Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 1758. "IN INDIA." Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 1745; 1900, pt. 4, pl. 266, fig. 648.

MASS.— Buzzards Bay (Smith 1898).

276. CHILOMYCTERUS SCHOEPFI (Walbaum).

Burrfish.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 1748; 1900, pt. 4, pl. 266, fig. 649.

Diodon schoepfi Walbaum, Artedi Pisc., 1792, p. 601. "LONG ISLAND."

MASS.— Massachusetts Bay (B. S. N. H.); Woods Hole (Baird 1873 and Smith 1898).

R. I.— Watch Hill (Goode 1879); Narragansett Bay (R. I. fish comm. 1899); Newport (Bean 1880 and Pope coll. 1904).

CONN.— (Ayres 1843); Stratford; New Haven (Linsley 1844); Noank (Bean 1880).

MOLIDAE.

277. Mola mola Linné.

Sunfish.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 1753; 1900, pt. 4, pl. 267, fig. 651.

Tetraodon mola Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 334. "in Mediterraneo."

Orthagariscus mola Schn. Storer, Mem. Amer. acad., 1863, vol. 8, p. 420, pl. 34, fig. 2.

Me.— Off Portland (U. S. nat. mus. 1875).

Mass.— Boston Bay (Storer 1839); Nahant (Binney 1843); Upper Southbridge, Boston (Storer 1844); Massachusetts Bay (Storer 1863); Woods Hole (Baird 1873); Salem Harbor; off Gloucester (Goode & Bean 1879); Vineyard Sound; Buzzards Bay (Smith 1898); Nantucket (Sharp & Fowler 1904).

R. I.— Narragansett Bay (R. I. fish comm. 1899); Block Island (Tracy 1906).

Conn.— Stonington (Linsley 1844); Noank (Goode 1879).

SCORPAENIDAE.

278. Sebastes marinus (Linné).

Red perch; Bream.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 1760; 1900, pt. 4, pl. 268, fig. 653.

Perca marina Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 290. "in Norvegia; Italia."

Sebastes norvegicus Cuv. Storer, Mem. Amer. acad., 1853, vol. 5, p. 86, pl. 7, fig. 1.

Me.— Near Portland (Perley 1852); Eastport (Verrill 1871; U. S. nat. mus. 1872; Boardman & Atkins 1875; Bean 1880; Kendall coll. 1893); Casco Bay (U. S. nat. mus. 1873; Lee 1885).

SCORPAENIDAE.

MASS.— Massachusetts Bay (Storer 1836, 1853 and Bean 1880); Misery Island, in Salem Harbor (Wheatland 1852); Provincetown (Storer 1854); Salem Harbor (Putnam 1856 and Wheatland 1859); Gloucester (Bean 1880); Woods Hole (Smith 1898).

279. SCORPAENA PLUMIERI Bloch.

Scorpion.

Bloch, Kongl. svenska vetensk. akad. Nya handl., 1789, vol. 10, p. 234. "MARTINIQUE." Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 1898.

MASS.— Katama Bay (Smith 1900).
CONN.— Stratford; Bridgeport (Linsley 1844).

280. SCORPAENA GRANDICORNIS Cuvier & Valenciennes.

Lionfish.

Cuvier & Valenciennes, Hist. nat. poissons, 1829, vol. 4, p. 309. "MARTINIQUE; PORTO RICO; HAVANA; SAN DOMINGO." Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 1850; 1900, pt. 4, pl. 278, fig. 672.

MASS.— Katama Bay (Smith 1900).

COTTIDAE.

281. ARTEDIELLUS ATLANTICUS Jordan & Evermann.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 1906; 1900, pt. 4, pl. 285, fig. 690.
Centridermichthys uncinatus (Reinh.), Goode & Bean, Bull. Essex inst., 1879, vol. 11, p. 13.

MASS.— Massachusetts Bay (Goode & Bean 1879; Jordan & Evermann 1898).

TELEOSTOMI. ACANTHOPTERI.

COTTIDAE.

282. Triglops pingellii Reinhardt.

Reinhardt, Kong. Dansk. vid. selsk. Afh., 1832, vol. 5, p. 52. "Greenland." Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 1923; 1900, pt. 4, pl. 286, fig. 697.

Mass.— Near Race Point Lighthouse (B. S. N. H.); Massachusetts Bay (Goode & Bean 1879).

283. Cottus gracilis Heckel.

Millers thumb; Rock cusk; Brook cusk.

Heckel, Ann. Wien. mus., 1839, vol. 2, p. 148. "New York." Storer, Mem. Amer. acad., 1853, vol. 5, p. 72, pl. 4, fig. 3.

Uranidea gracilis (Heckel). Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 1968.

Me.— Richardson Lake (B. S. N. H.); Auburn (U. S. nat. mus. 1883); Bear River (Bowdoin college); Webster, Chamberlain, Eagle, Churchill and Beau lakes; Cross Lake Thoroughfare; tributary of Aroostook River, Caribou, (Kendall 1903); Rangeley Lakes (Atkins coll. 1903); Sebago Lake (Moses coll., 1906).

N. H.— Saco River, Bartlett (Storer 1853); Upper Connecticut River tributaries; Connecticut Lakes (Kendall & Goldsborough coll. 1904).

Vt.— Johnson (Girard 1850); Windsor, Burlington (Girard 1850); River Lamoille (Thompson 1853).

Mass.— Clintonville (Dowse 1850) Williamstown (B. S. N. H., Buck & Nason coll.); Plymouth (Goode 1879).

Conn.— Manchester (Linsley 1844; Ayres 1845; Girard 1850).

284. Myoxocephalus aeneus (Mitchill).

Grubby; Pygmy sculpin.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 1972; 1900, pt. 4, pl. 295, fig. 1716.

TELEOSTOMI. ACANTHOPTERI.

COTTIDAE.

Cottus aeneus Mitchill, Rept. fish. N. Y., 1814, p. 8, "New York." ? Storer, Report, 1839, p. 20.

Me.— Casco Bay (U. S. nat. mus., 1873; Lee 1885); Wolfsneck, Casco Bay (Kendall coll.).

Mass.— Off Cape Ann (B. S. N. H., Hyatt, VanVleck & Gardiner coll.); Gloucester; Salem (Goode & Bean 1879); Woods Hole (Baird 1873; Bean 1880 and Smith 1898).

R. I.— Narragansett Bay (R. I. fish comm. 1899) Willow Beach (Tracy 1906).

Conn.— Bridgeport; Norwalk (Linsley 1844); Noank (Bean 1880).

285. Myoxocephalus scorpius (Linné).

Shorthorn sculpin; Ulki.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 1974; 1900, pt. 4, pl. 295, fig. 717.

Cottus scorpius Linné, Syst. nat., ed. 10, 1758, p. 265. "in Oceano Europaeo."

Me.— Eastport (Goode & Bean 1879; Bean 1880; Kendall coll. 1893); Casco Bay, Freeport (Kendall coll. 1892 and 1896).

286. Myoxocephalus groenlandicus (Cuvier & Valenciennes).

Deepwater sculpin; Black sculpin; Daddy sculpin.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 1974.

Cottus groenlandicus Cuv. & Val., Hist. nat. poissons, 1829, vol. 4, p. 156. "Greenland."

Acanthocottus variabilis Girard. Storer, Mem. Amer. acad., 1853, vol. 5, p. 74, pl. 4. fig. 1.

Me.— Eastport (Verrill 1871; U. S. nat. mus. 1872; Bean 1880 and Kendall coll. 1893); Bucksport (U. S. nat. mus. 1878); Casco

Bay (U. S. nat. mus. 1873); Portland (Bean 1880); Whaleboat Island, Casco Bay (Kendall coll. 1892); Penobscot River and Bay (Evermann 1893).

MASS.— Nahant; Boston (Storer 1839); Nantucket Shoals (Storer 1848); Shores of Massachusetts Bay (Ayres 1850); Chelsea (Girard 1850); near Craigie Bridge, Boston (Ayres 1850); off Nantucket; Massachusetts Bay (Storer 1853); Salem (Wheatland 1859 and Bean 1880); Gloucester (Bean 1880); North Truro (Kendall coll. 1896); Woods Hole (Smith 1898); Cape Cod (Jordan & Evermann 1898).

R. I.— Narragansett Bay (R. I. fish comm. 1899).

CONN.— Long Island Sound (Linsley 1844); Shores (Girard 1850).

287. MYOXOCEPHALUS OCTODECIMSPINOSUS (Mitchill).

Sculpin; Hacklehead; Toadfish.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 1976; 1900, pt. 4, pl. 296, fig. 718.

Cottus 18-spinosus Mitchill, Rept. fish. N. Y., 1814, p. 7. "NEW YORK."

Acanthocottus virginianus Girard. Storer, Mem. Amer. acad., 1853, vol. 5, p. 76, pl. 4, fig. 2.

ME.— Common along whole coast. Eastport (Verrill 1871; Kendall coll. 1893); Casco Bay (U. S. nat. mus. 1873; Lee 1885; Kendall coll. 1892–1903); Bucksport (U. S. nat. mus. 1878); Portland (Bean 1880).

N. H.—

MASS.—"Our bay" (Storer 1836); Massachusetts Bay (B.S.N.H., Kneeland & Wheatland coll.); Chatham (B. S. N. H., Davidson coll.); common (Storer 1839 and 1853); Salem (Wheatland 1859); Waquoit (Lyman 1872); Boston (Goode 1879); Salem; Gloucester (Bean 1880); North Truro; Monomoy; Menemsha

Bight (Kendall coll. 1896); Cape Cod (Jordan & Evermann 1898); Woods Hole (Baird 1873; Bean 1880 and Smith 1898); Nantucket (Sharp & Fowler 1904).

R. I.—Brentons Reef (Tracy 1906).

CONN.—Stonington (Linsley 1844).

288. GYMNOCANTHUS TRICUSPIS (Reinhardt).

Staghorn sculpin.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 2008.

Cottus tricuspis Reinhardt, Kong. Dansk. vid. selsk. Afh., 1838, vol. 7, p. 117. "GREENLAND."

ME.—Eastport (U. S. nat. mus. 1872).

289. HEMITRIPTERUS AMERICANUS (Gmelin).

Sea raven; Sea sculpin; Toadfish.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 2023; 1900, pt. 4, pl. 305, fig. 738.

Scorpaena americana Gmelin, Syst. nat., 1788, vol. 1, p. 1220. "AMERICA."

Hemitripterus acadianus Storer. Storer, Mem. Amer. acad., 1853, vol. 5, p. 83, pl. 7, fig. 4.

ME.—Eastport (U. S. nat. mus. 1872; Bean 1880; Kendall coll. 1893); Casco Bay (U. S. nat. mus. 1873; Lee 1885; Kendall coll. 1896); Bucksport (U. S. nat. mus. 1878; Bean 1880); Portland (Bean 1880).

N. H.—

MASS.—"Very common" (Storer 1836); Massachusetts Bay (Storer 1853); Salem Harbor (Putnam 1856); Waquoit (Lyman 1872); Annisquam (B. S. N. H., Hyatt, Van Vleck & Gardiner coll.); Boston; Nantucket; Gloucester (Bean 1880); North Truro;

COTTIDAE.

Monomoy; Menemsha Bight (Kendall coll. 1896); Woods Hole (Baird 1873; Bean 1880 and Smith 1898).

R. I.— Newport (Bean 1880); Narragansett Bay (R. I. fish comm. 1899); Connanicut Island (Tracy 1906).

CONN.— Stonington (Linsley 1844); Noank (Bean 1880).

AGONIDAE.

290. ASPIDOPHOROIDES MONOPTERYGIUS (Bloch).

Sea poacher; Alligator fish.

Storer, Mem. Amer. acad., 1853, vol. 5, p. 80, pl. 8, fig. 1. Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 2091; 1900, pt. 4, pl. 312, fig. 756.

Cottus monopterygius Bloch, Nat. ausl. fische, 1786, vol. 2, p. 156, pl. 178, fig. 1, 2. ——

ME.— Eastport (U. S. nat. mus. 1872; Kendall coll. 1893).

MASS.— Near Nahant (Storer 1839); Provincetown; Cape Cod; Boston Bay (Storer 1853); Ipswich Bay (B. S. N. H., Hyatt, Van Vleck & Gardiner coll.); Massachusetts Bay (Goode & Bean 1879 and Bean 1880).

R. I.— Watch Hill (Goode & Bean 1879).

CYCLOPTERIDAE.

291. CYCLOPTERUS LUMPUS Linné.

Lumpfish; Lumpsucker.

Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 260. "IN OCEANO BALTHICO & SEPTENTRIONALI." Garman, Mem. M. C. Z., 1892, vol. 14, p. 21, pl. 8, fig. 1–3; pl. 9, fig. 2, pl. 10, fig. 3, pl. 11, fig. 10, pl. 12–13. Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 2096; 1900, pt. 4, pl. 313, fig. 757.

Lumpus anglorium Willoughby. Storer, Mem. Amer. acad., 1863, vol. 8, p. 402, pl. 32, fig. 2.

CYCLOPTERIDAE.

ME.— All along the coast. Eastport (U. S. nat. mus. 1872; Kendall coll. 1893); off Seguin (B. S. N. H., Arethusa coll. 1880); Bucksport (U. S. nat. mus. 1878); Casco Bay (U. S. nat. mus. 1873 and 1887; Lee 1885; Kendall coll. 1896; Penobscot River and Bay (Evermann 1903).

MASS.— Massachusetts Bay (Storer 1839; 1863); Massachusetts Bay, off the Misery (Putnam 1817); Waquoit (Lyman 1872); Woods Hole (Baird 1873 and Goode 1879); Plymouth (B. S. N. H., Bartlett coll.); Swampscot (B. S. N. H., Nason coll.); Nahant (Garman 1892); North Truro; Monomoy; Menemsha Bight (Kendall coll. 1896); Vineyard Sound (Smith 1898); Nantucket (Sharp & Fowler 1904).

R. I.— Newport (Bean 1880); Narragansett Bay (R. I. fish comm. 1899).

292. EUMICROTREMUS SPINOSUS (Müller).

Spring lumpfish.

Garman, Mem. M. C. Z., 1892, vol. 14, p. 34, pl. 11, fig. 1-3. Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 2098.

Cyclopterus spinosus Müller, Zool. Danicae Prodr., 1776 p. ix.

ME.— Eastport (Garman 1892).

MASS.— Massachusetts Bay (Goode & Bean 1879); off Cape Ann (B. S. N. H.).

LIPARIDIDAE.

293. NEOLIPARIS ATLANTICUS Jordan & Evermann.

Dark lumpsucker.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 2107. "GODBOUT, QUEBEC. * * * SALEM. * * * WOODS HOLE, MASSACHUSETTS. * * * FROM NEWFOUNDLAND TO CAPE COD."

Liparis (sp.?) Storer, Mem. Amer. acad., 1867, vol. 9, p. 256.

TELEOSTOMI. ACANTHOPTERI.

LIPARIDIDAE.

Liparis montagui Donovan. Garman, Mem. M. C. Z., 1892, vol. 14, p. 47, pl. 7, fig. 6–20; pl. 8, fig. 8–12.

ME.— Eastport; Portland Harbor (Garman 1892); Kittery (Bowdoin college); Seguin (Spinney coll. 1900).

MASS.— Massachusetts Bay; Salem; Nahant (Storer [Putnam] 1867); Salem Harbor (Putnam 1873 and Garman 1892); Woods Hole (Smith 1898).

CONN.— (Garman 1892).

294. LIPARIS LIPARIS (Linné).

Seasnail; Striped seasnail.

Garman, Mem. M. C. Z., 1892, vol. 14, p. 57, pl. 7, fig. 1–5, 21–22. Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 116.

Cyclopterus liparis Linné, Syst. nat., ed. 12, 1766, vol. 1, p. 414. "IN OCEANO SEPTENTRIONALI."

ME.— Near Eastport (Kendall coll. 1893).

MASS.— Salem Harbor (Putnam 1873); near Salem; Bakers Island (Goode & Bean 1879); Woods Hole (Smith 1898).

R. I.— Watch Hill Reef (Goode 1879); "Off Block Island"? (Garman 1892).

CONN.— Off Connecticut (Garman 1892).

TRIGLIDAE.

295. PRIONOTUS CAROLINUS (Linné).

Sea robin; Greeneye.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 2156; 1900, pt. 4, pl. 318, fig. 768.

Trigla carolina Linné, Mantissa, 1767, p. 528. "IN CAROLINAE MARI."

Prionotus palmipes Storer. Storer, Mem. Amer. acad., 1853, vol. 5, p. 66, pl. 5, fig. 1.

TELEOSTOMI. ACANTHOPTERI.

TRIGLIDAE.

Prionotus pilatus Storer. Storer, Mem. Amer. acad., 1853, vol. 5, p. 68, pl. 6, fig. 1.

ME.— Casco Bay; off Monhegan (Smith & Kendall 1898); Casco Bay (Bowdoin).

MASS.— Holmes Hole (Storer 1839 and 1844); Massachusetts Bay (Storer 1845); Green Island; Phillips Point, Lynn (Storer 1842); Salem Harbor (Wheatland 1852); Vineyard Sound; Green Island; Phillips Point, Lynn; Massachusetts Bay (Storer 1845 and 1853); Tisbury (Storer 1853); Waquoit (Lyman 1872); Salem (Goode & Bean 1879); Annisquam (B. S. N. H.); Cohasset Narrows (Bean 1880); North Truro; Monomoy; Menemsha Bight (Kendall coll. 1896); Woods Hole (Baird 1873; Bean 1880 and Smith 1898); Nantucket (Sharp & Fowler 1904).

R. I.— Narragansett Bay (R. I. fish. comm. 1899).

CONN.— Stratford; Stonington (Linsley 1844); Noank (Bean 1880); off Bridgeport; off Stratford; Middle Ground; Penfield Reef (Kendall coll. 1890); off Faulkners Island; off Norwalk Light House (Kendall. coll. 1892).

296. PRIONOTUS STRIGATUS (Cuvier).

Redwinged Sea robin.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 2167.

Trigla strigata Cuvier, Régne anim., ed. 2, 1829, vol. 2, p. 161. "NEW YORK."

Prionotus lineatus DeKay. Storer, Mem. Amer. acad., 1853, vol. 5, p. 64, pl. 5, fig. 4.

MASS.— Holmes Hole (Storer 1839); Salem Harbor (Wheatland 1852); Vineyard Sound (Storer 1853); Waquoit (Lyman 1872); North Truro; Monomoy; Menemsha Bight (Kendall coll. 1896); Gloucester (B. S. N. H., Hyatt. coll.); Woods Hole

TRIGLIDAE.

(Baird 1873; Bean 1880 and Smith 1898); Marthas Vineyard (Jordan & Evermann 1898).

R. I.— Newport (Bean 1880); Narragansett Bay (R. I. fish comm. 1899).

CONN.— Stratford; Stonington (Linsley 1844); Noank (Bean 1880); off Stratford; off Bridgeport; Middle Ground (Kendall coll. 1890); off Faulkners Island; off S. W. Ledge; off Branford Beacon (Kendall coll. 1892).

CEPHALACANTHIDAE.

297. CEPHALACANTHUS VOLITANS (Linné).

Flying robin.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 2, p. 2183; 1900, pt. 4, pl. 323, fig. 788.

Trigla volitans Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 302. "IN MARI MEDITERRANEO, OCEANO, PELAGO INTER TROPICOS, IN ASIA, IMPRIMIS AD CAP. B. SPEI, SAEPE AGITATA EVOLANS EX AQUA."

Dactylopterus volitans Cuv. Storer, Mem. Amer. acad., 1853, vol. 5, p. 70, pl. 6, fig. 5.

ME.— (Holmes 1862).

MASS.— Holmes Hole (Storer 1853); Woods Hole (Baird 1873 and Bean 1880); Buzzards Bay; Vineyard Sound (Smith 1898).

R. I.— Narragansett Bay (R. I. fish comm. 1899).

CONN.— Long Island Sound (Linsley 1844).

GOBIIDAE.

298. GOBIOSOMA BOSCI (Lacépède).

Naked goby.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 3, p. 2259.

TELEOSTOMI. ACANTHOPTERI.

GOBIIDAE.

Gobius bosci Lacépède, Hist. nat. poissons, 1800, vol. 2, p. 555, pl. 16, fig. 1. "CHARLESTON, S. C."

Gobius alepidotus Bosc. DeKay, N. Y. fauna, 1842, pt. 4, p. 160, pl. 23, fig. 70.

MASS.— Buzzards Bay (Smith 1898).

CONN.— Bridgeport (Linsley 1844).

ECHENEIDIDAE.

299. ECHENEIS NAUCRATES Linné.

Sharksucker.

Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 261. "IN PELAGO INDICO." Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 3, p. 2269; 1900, pt. 4, pl. 329, fig. 796.

? *Echeneis albicauda* Mitchill. Storer, Mem. Amer. acad., 1863, vol. 8, p. 404, pl. 32, fig. 3.

MASS.— Boston (Storer 1839); Hyannis (Storer 1842); Colins Cove, Salem (Wheatland 1852); Boston Bay (Storer 1839 and 1863); Holmes Hole (B. S. N. H., Storer coll.); Woods Hole (Baird 1873 and Smith 1898); West Falmouth (Smith 1898); Nantucket (Sharp & Fowler 1904).

R. I.— Newport (Bean 1880); Narragansett Bay (R. I. fish comm. 1899).

CONN.— Long Island Sound (Linsley 1844).

300. ECHENEIS NAUCRATEOIDES Zuiew.

Pilotsucker.

Zuiew, Nova acta acad. sci. imp. Petropol., 1789, vol. 4, p. 279. —— Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 3, p. 2270.

MASS.—Hyannis (Storer 1842); Collins Cove; Mouth Merrimac River? (Goode & Bean 1879); Woods Hole (Baird 1873 and Smith 1898).

R. I.— Dutch Island Harbor (Tracy 1906).

ECHENEIDIDAE.

301. REMORA REMORA (Linné).

Remora.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 3, p. 2271.

Echeneis remora Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 260. "IN PELAGO INDICO."

MASS.— Salem Harbor (Goode & Bean 1879); Woods Hole (Baird 1873 and Smith 1898).

302. REMORA BRACHYPTERA (Lowe).

Swordfish sucker.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 3, p. 2272; 1900, pt. 4, pl. 330, fig. 797.

Echeneis brachyptera Lowe, Proc. zool. soc. London, 1839, p. 89. "MADEIRA."

Echeneis 14-laminatus Storer. Storer Mem. Amer. acad., 1863, vol. 8, p. 406, pl. 22, fig. 4.

MASS.— Holmes Hole (Storer 1839); Wellfleet (Storer 1863); Massachusetts Bay (Goode & Bean 1879); Woods Hole (Baird 1873 and Smith 1898).

303. RHOMBOCHIRUS OSTEOCHIR (Cuvier).

Spearfish sucker.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 3, p. 2273; 1900, pt. 4, pl. 330, fig. 798.

Echeneis osteochir Cuv., Regne anim., ed. 2, 1829, vol. 2, p. 348.

MASS.— Woods Hole (Baird 1873 and Smith 1898).

R. I.— Narragansett Bay (R. I. fish comm. 1899).

BATRACHOIDIDAE.

304. Opsanus tau (Linné).

Toadfish.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 3, p. 2315.

Gadus tau Linné, Syst. nat., ed. 12, 1766, vol. 1, pt. 1, p. 440. "in Carolina."

Batrachus tau Linné. Storer, Mem. Amer. acad. 1855, vol. 5, p. 271, pl. 19, fig. 1–2.

Me.— Kittery [?] (Holmes 1862).

Mass.— Holmes Hole (Storer 1839); Tisbury (Storer 1855); Cohasset (B. S. N. H., Bryant coll.); Long Point Creek (B. S. N. H., 1874); Massachusetts Bay (Goode & Bean 1879); Menemsha Bight (Kendall coll. 1896); Woods Hole (Baird 1873; Bean 1880 and Smith 1898).

R. I.— Narragansett Bay (R. I. fish comm. 1998).

Conn.— Noank (Bean 1880).

PHOLIDIDAE.

305. Pholis gunnellus (Linné).

Butterfish; Rockeel.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 3, p. 2419; 1900, pt. 4, pl. 342, fig. 832.

Blennius gunnellus Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 257. "in Oceano Atlantico."

Gunnellus mucronatus Cuv. Storer, Mem. Amer. acad., 1855, vol. 5, p. 260, pl. 17, fig. 2.

Gunnellus macrocephalus Girard. Storer, Mem. amer. acad., 1855, vol. 5, p. 261, pl. 17, fig. 3.

Me.— Along the whole coast. Eastport (U. S. nat. mus. 1872;

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Bean 1880; Kendall coll. 1893); Matinicus Island (B. S. N. H., Arethusa coll. 1880); Casco Bay (U. S. nat. mus. 1873; Lee 1885; Kendall coll. 1892); New Meadows River (Bowdoin college 1890).

MASS.— Chelsea Beach (H. R. Storer 1850); Holmes Hole; Provincetown; Nahant (Storer 1855); Naugus Head (Goode & Bean 1879); Ipswich Bay (B. S. N. H., Hyatt, Van Vleck & Gardiner coll.); New Bedford (Bean 1880); Woods Hole (Baird 1873; Bean 1880 and Smith 1898); Vineyard Sound (Smith 1898).

R. I.— Narragansett Bay (R. I. fish comm. 1899 and Tracy 1906).

CONN.— Bridgeport; Stonington (Linsley 1844).

STICHAEIDAE.

306. LEPTOCLINUS MACULATUS (Fries).

Langbarn.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 3, p. 2433.

Clinus maculatus Fries, Kongl. svenska vetensk akad. Nya handl., 1838 (1837), p. 49. "BAHÜSLAN, SWEDEN."

MASS.— Massachusetts Bay (Goode & Bean 1879).

307. LUMPENUS LAMPETRAEFORMIS (Walbaum).

Snake blenny.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 3, p. 2438; 1900, pt. 4, pl. 344, fig. 840.

Blennius lumpretae-formis; *lampretaeformis*; *lampretiformis*, Walbaum, Artedi Pisc., 1792, pp. 184, 700 and 702. "ICELAND."

Blennius serpentinus Storer. Storer Mem. Amer. acad., 1855, vol. 5, p. 257, pl. 17, fig. 1.

ME.— Eastport (U. S. nat. mus. 1872).

STICHAEIDAE.

MASS.— Massachusetts Bay (Storer 1848, 1855; Goode & Bean 1879).

308. ULVARIA SUBBIFURCATA (Storer).

Radiated shanny.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1896, pt. 3, p. 2440; 1900, pt. 4, pl. 345, fig. 842.

Pholis subbifurcatus Storer, Rept. 1839, p. 63. "NAHANT." Mem. Amer. acad., 1855, vol. 5, p. 258.

ME.— Casco Bay (U. S. nat. mus., 1873); off Matinicus (Norton coll. 1906).

MASS.— Nahant (Storer 1839 and 1855).

CRYPTACANTHODIDAE.

309. CRYPTACANTHODES MACULATUS Storer.

Wrymouth; Congereel.

Storer, Rept., 1839, p. 28. "BOSTON HARBOR * * * NAHANT." Mem. Amer. acad. 1853, vol. 5, p. 82, pl. 8, fig. 6. Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 3, p. 2443; 1900, pt. 4, pl. 345, fig. 843.

ME.— Eastport (U. S. nat. mus., 1853; Kendall 1893); Portland (Goode 1879); Casco Bay (Lee 1885; Kendall coll. 1893); Middle Bay (Bowdoin College).

N. H.— (Peck 1804).

MASS.— Boston Harbor; Nahant (Storer 1839); Commercial Point (Storer 1842f); Provincetown; Dorchester: Massachusetts Bay (Storer 1853); Marblehead; Swampscot (Goode & Bean 1879); Woods Hole (Smith 1898).

R. I.— Provincetown (Goode 1879).

CONN.— Bridgeport (Linsley 1844).

ANARHICHADIDAE.

310. ANARHICHAS MINOR Olafsen.

Spotted wolffish.

Olafsen, Reise i Island, 1772, p. 592. "ISLAND." Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 3, p. 2446.

ME.— Eastport (Goode & Bean 1896).

MASS.— Off mouth Gloucester Harbor (Goode & Bean 1896).

311. ANARHICHAS LUPUS Linné.

Wolffish; Catfish.

Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 247. "IN OCEANO SEPTENTRIONALI ANGLIAE, &C." Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 3, p. 2446; 1900, pt. 4, pl. 348, fig. 846. Goode & Bean, Oceanic ichth., 1896, p. 299, pl. 77, fig. 269.

Anarrhicas vomerinus Agassiz. Storer, Mem. Amer. acad., 1855, vol. 5, p. 265, pl. 18, fig. 1.

ME.— Eastport (Verrill 1871; Kendall coll. 1893); Casco Bay Lee 1885; Kendall coll.).

MASS.— Cusk Rocks (Storer 1839 and 1855); Annisquam (B. S. N. H., Arethusa coll.); off Gloucester (Bean 1880); North Truro (Kendall coll. 1896); Woods Hole; Vineyard Sound (Smith 1898).

R. I.— Coxswains Ledge (Goode 1879); Narragansett Bay (R. I. fish comm. 1899).

ZOARCIDAE.

312. ZOARCES ANGUILLARIS (Peck).

Eelpout; Conger eel; Lamper-eel; Ling.

Storer, Mem. Amer. acad., 1855, vol. 5, p. 263, pl. 17, fig. 4. Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 3, p. 2457; 1900, pt. 4, pl. 348, fig. 850.

Blennius anguillaris Peck, Mem. Amer. acad., 1804, vol. 2, p. 46, fig. "NEW HAMPSHIRE."

TELEOSTOMI. ACANTHOPTERI.

ZOARCIDAE.

Me.— Eastern River (Williamson 1832); Eastport (U. S. nat. mus. 1872; Bean 1880; Kendall coll. 1893). Bucksport (U. S. nat. mus. 1878); Portland (Bean 1880); Casco Bay (Lee 1885; Kendall coll. 1896; 1903 and 1904).

N. H.— (Peck 1804).

Mass.— Massachusetts Bay (Storer 1836); Provincetown (Storer 1855); North Truro (B. S. N. H., Davidson coll.); off Cape Ann, and Annisquam (B. S. N. H., Hyatt, Van Vleck & Gardiner coll.); Gloucester (Bean 1880); Nantucket Shoals (Goode 1879); Gayhead; Cuttyhunk (Smith 1898).

R. I.— Block Island; Narragansett Bay (R. I. Fish Comm. 1899).

Conn.— Middleground (Linsley 1844).

313. Lycodes reticulatus Reinhardt.

Reinhardt, Kong. Dansk. vid. selsk. Afh., 1838, vol. 7, p. 167. "Greenland." Goode & Bean, Oceanic ichth., 1896, p. 305, pl. 78, fig. 273; pl. 81, fig. 281. Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 3, p. 2465; 1900, pt. 4, pl. 349, fig. 854.

Mass.— Vineyard Sound (Goode & Bean 1896; Smith 1898).

R. I.— Narragansett Bay (Goode & Bean 1896; Smith 1898).

314. Lycodes verrillii Goode & Bean.

Goode & Bean, Amer. journ. sci., 1877, vol. 14, p. 474. "thirty miles south of Cape Negro, N. S. and twenty-seven miles south of Chebucto Head, Halifax."

Lycenchelys verrillii Goode & Bean, Oceanic ichth., 1896, p. 309, pl. 79, fig. 277. Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 3, p. 2470; 1900, pt. 4, pl. 351, fig. 859.

Mass.— "Deepwater of the bay" (Goode & Bean 1879); off Cape Cod; off Thatchers Island (Goode & Bean 1896).

R. I.— Newport [?] (B. S. N. H.).

TELEOSTOMI. ACANTHOPTERI.

MERLUCCIDAE.

315. MERLUCCIUS BILINEARIS (Mitchill).

Silver Hake; New England Hake; Whiting.

Goode & Bean, Oceanic ichth., 1896, p. 385, pl. 95, fig. 330. Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 3, p. 2530.

Stomodon bilinearis Mitchill, Rept. fish. N. Y., 1814, p. 7. "NEW YORK."

Merlucius albidus DeKay. Storer, Mem. Amer. acad., 1858, vol. 6, p. 363, pl. 28, fig. 2.

ME.— Along whole coast; Eastport (Bean 1880; Kendall coll. 1893); Portland (Bean 1880); Casco Bay (Kendall coll. 1896); Penobscot River and Bay (Evermann 1903).

MASS.— Holmes Hole (Storer 1839); Crab Ledge; Provincetown (Storer 1859); Boston Bay (B. S. N. H., Cutting coll.); Annisquam (B. S. N. H.); Waquoit (Lyman 1872); Woods Hole (Baird 1873); New Bedford; Nomans Land; Gloucester (Bean 1880); off Cape Ann (Goode & Bean 1896); North Truro; Monomoy; Menemsha Bight (Kendall coll. 1896); Buzzards Bay (Smith 1898); Nantucket (Sharp & Fowler 1904).

R. I.— Narragansett Bay (Goode & Bean 1896; R. I. fish comm. 1899).

CONN.— Stonington (Linsley 1844); off Stratford (Kendall coll. 1890); off Faulkners Island; off Branford Beacon (Kendall coll. 1892).

GADIDAE.

316. POLLACHIUS VIRENS (Linné).

Pollock.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 3, p. 2534; 1900, pt. 4, pl. 359, fig. 886.

Gadus virens Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 253. "IN OCEANO EUROPAEO."

GADIDAE.

Merlangus purpureus Storer. Storer, Mem. Amer. acad., 1858, vol. 6, p. 358, pl. 28, fig. 3.

Me.— Along the whole coast. Eastport (U. S. nat. mus. 1872; Verrill 1871; Bean 1880; Kendall coll. 1893); off Moosabec Light; Isle au Haute, Matinic, Matinicus, Monhegan and Seguin islands; Cape Porpoise (Collins & Rathbun 1887); Sheepscot River (Bowdoin college); Casco Bay (Lee 1885; Kendall coll. 1892; 1896; 1900–1904); Searsport; Stockton Springs; Brookville (Evermann 1903).

Mass.— Common along whole coast; Jeffries Ledge (Storer 1839 and 1859); Provincetown (Atwood 1867); Salem Harbor (B. S. N. H., Brown coll.); Annisquam (B. S. N. H., Hyatt & Van Vleck coll.); Woods Hole (Baird 1873 and Bean 1880); Gloucester (Bean 1880); North Truro; Monomoy; Menemsha Bight (Kendall coll. 1896); Vineyard Sound (Smith 1898); Nantucket (Sharp & Fowler 1904).

R. I.— Narragansett Bay (R. I. fish comm. 1899); Dutch Island Harbor and from Brentons Reef to Sakonnet (Tracy 1906).

Conn.— Long Island Sound; Stratford (Linsley 1844).

317. Microgadus tomcod (Walbaum).

Tomcod; Frostfish.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 3, p. 2540.

Gadus tomcod Walbaum, Artedi Pisc., 1792, p. 133. "New York."

Morrhua pruinosa DeKay. Storer, Mem. Amer. acad. 1858, vol. 6, p. 357, pl. 27, fig. 5.

Me.— Common along whole coast. Eastport (U. S. nat. mus. 1872; Bean 1880; Kendall coll. 1893); Machias, Chandlers, Wescongus, Tunk, Penobscot, Kennebec and Piscataqua rivers; Casco Bay and tributaries (Atkins 1887); Casco Bay (Lee 1885;

Bean 1880; Kendall coll. 1902); Penobscot River & Bay (Evermann 1903).

N. H.— Piscataqua River (Atkins 1880).

MASS.— Boston; Watertown (Storer 1839 and 1859); Massachusetts Bay (B. S. N. H., Storer coll., Davidson coll.); Woods Hole (Baird 1873; Bean 1880 and Smith 1898).

R. I.— Narragansett Bay (R. I. fish comm. 1899).

CONN.— Streams flowing into Long Island Sound (Linsley 1844); Noank (Bean 1880).

318. GADUS CALLARIAS Linné.

Cod.

Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 252. "IN OCEANO EUROPAEO & BALTHICO." Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 3, p. 2541; 1900, pt. 4, pl. 361, fig. 891.

Morrhua americana Storer. Storer, Mem. Amer. acad., 1858, vol. 6, p. 343, pl. 27, fig. 4.

ME.— Common along whole coast. Eastport (Verrill 1871; U. S. nat. mus. 1872; Kendall coll. 1893); grounds off Moosabec Light; Petit Manan; Mount Desert; Isle au Haute; Matinicus; Matinic and Monhegan islands; north; northeast; south and southeast of Monhegan; between Monhegan and Pemaquid; off Seguin; off Casco Bay; off Cape Porpoise (Collins & Rathbun 1887); Portland (Goode 1879); Casco Bay (U. S. nat. mus. 1873; Lee 1885; Kendall coll.); Penobscot River and Bay (Evermann 1903).

N. H.— Off Portsmouth; Piscataqua River (Collins & Rathbun 1887).

MASS.— Along whole coast (Storer 1839); Provincetown (Storer 1859; Atwood 1865 and Bean 1880); Waquoit (Lyman 1872); Woods Hole (Baird 1873); Ipswich Bay (B. S. N. H., Davidson

coll.); Salem Harbor (B. S. N. H., Brown coll.); Cape Ann (Goode & Bean 1879); Nomans Land; Woods Hole; Gloucester (Bean 1880); Ipswich Bay; off Cape Ann, Middle Bank; Pollack Rip; Nantucket Shoals (Collins & Rathbun 1887); North Truro; Monomoy (Kendall coll. 1896); Vineyard Sound (Smith 1898); Nantucket (Sharp & Fowler 1904).

R. I.— Narragansett Bay (R. I. fish comm. 1899); off Block Island (Collins & Rathbun 1887).

CONN.— Stonington (Linsley 1844).

319. MELANOGRAMMUS AEGLIFINUS (Linné).

Haddock; Whiteeye.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 3, p. 2542; 1900, pt. 4, pl. 361, fig. 892.

Gadus aeglifinus Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 251. "IN OCEANO EUROPAEO."

Morrhua aeglifinus Linné. Storer, Mem. Amer. acad. 1858, vol. 6, p. 355, pl. 28, fig. 1.

ME.— Along whole coast. Eastport (Verrill 1871; U. S. nat. mus. 1872; Kendall coll. 1893); Grounds off Petit Manan; Mount Desert; Isle au Haute; Matinicus; Matinic, Monhegan and Seguin islands; off Casco Bay and Cape Porpoise (Collins & Rathbun 1887); Portland (Goode 1879); Casco Bay (U. S. nat. mus. 1873; Lee 1885; Kendall coll.).

MASS.— Cape Cod; Massachusetts Bay (Storer 1839 and 1859); Woods Hole (Baird 1873); off Cape Ann; off Chatham, (Collins & Rathbun 1887); off Gay Head and Marthas Vineyard (Smith 1898); Nantucket (Sharp & Fowler 1904).

R. I.— Narragansett Bay (R. I. fish comm. 1899); off Block Island (Collins & Rathbun 1887).

CONN.— Stonington (Linsley 1844).

TELEOSTOMI. ACANTHOPTERI.

GADIDAE.

320. LOTA MACULOSA (Le Sueur).

Burbot; Freshwater cusk; Lawyer; Ling.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 3, p. 2550; 1900, pt. 4, pl. 364, fig. 897.

Gadus maculosus Le Sueur, Journ. acad. nat. sci. Phil., 1817, vol. 1, p. 83. "LAKE ERIE."

Lota compressa Le Sueur. Storer, Mem. Amer. acad. 1858, vol. 6, p. 360, pl. 28, fig. 4.

ME.— Moosehead Lake (B. S. N. H., Davidson coll.); Sebago Lake (Mitchill 1818; Bowdoin college; Kendall coll. 1903); Stillwater River (Merrill coll.); Eagle and St. Francis lakes (Perley 1852; Kendall coll. 1901 and 1903); Matagamon, and Allagash River lakes; Hurd Pond & Debsconeag Lake (Kendall coll. 1901).

N. H.— Ashuelot River (Storer 1839); Lake Winnipisseogee (Storer 1841?; 1842; Prescot 1851); Squam Lake; Winnipesaukee Lake (N. H. fish comm. 1877); Indian Stream & Connecticut Lakes (Kendall & Goldsborough coll. 1904).

VT.— Lake Champlain (Thompson 1842); (Storer 1842).

MASS.— Connecticut River at Northampton (LeSueur 1818).

CONN.— Canaan (Linsley 1844).

321. UROPHYCIS REGIUS (Walbaum).

Spotted hake.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 3, p. 2553; 1900, pt. 4, pl. 364, fig. 898.

Blennius regius Walbaum, Artedi Pisc., 1792, p. 186. "NEW YORK."

ME.— Off Seguin Island (B. S. N. H., Arethusa coll.).

MASS.— Woods Hole (Smith 1898).

CONN.— Long Island Sound (Linsley 1844); off Stratford; Middle Ground (Kendall coll. 1890); off Faulkners Island (Kendall coll. 1892).

GADIDAE.

322. Urophycis tenuis (Mitchill).

Hake; White hake.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 3, p. 2555; 1900, pt. 4, pl. 365, fig. 901.

Gadus tenuis Mitchill, Rept. fish. N. Y., 1814, p. 4. "New York."

Phycis americanus Storer. Storer, Mem. Amer. acad., 1858, vol. 6, p. 365, pl. 29, fig. 3.

Me.— Muddy bottoms along the whole coast. Eastport (Verrill 1871); U. S. nat. mus. 1872; Bean 1880; Kendall coll. 1893); Portland (Bean 1880); Grounds off Moosabec Light, Petit Manan; Isle au Haute; Matinicus and Matinic Islands; southeast of Monhegan; between Monhegan and Pemaquid; off Seguin (Collins & Rathbun 1887); Casco Bay (U. S. nat. mus. 1873); Lee 1885; Kendall coll. 1896; 1900 and 1903).

Mass.— Between Cape Ann and Boston Light House (Storer 1839 and 1859); Massachusetts Bay (B. S. N. H., Storer coll.); Annisquam (B. S. N. H., Hyatt & Van Vleck coll.); Provincetown (Atwood 1867 and Bean 1880); Waquoit (Lyman 1872); North Truro; Monomoy; Menemsha Bight (Kendall coll. 1896); Woods Hole (Bean 1880 and Smith 1898).

R. I.— Watch Hill (B. S. N. H., Hyatt & Rathbun coll.); Narragansett Bay (R. I. fish comm. 1899); off Watch Hill (Tracy 1906).

Conn.— Off Stratford; Middle Ground (Kendall coll. 1890).

323. Urophycis chesteri (Goode & Bean).

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 3, p. 2556; 1900, pt. 4, p. 366, fig. 903.

Phycis chesteri Goode & Bean, Proc. U. S. nat. mus., 1878, vol. 1, p. 256. "Off Cape Ann in 140 fathoms."

Mass.— Massachusetts Bay (Goode & Bean 1879).

GADIDAE

324. Urophycis chuss (Walbaum).

Squirrel hake.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 3, p. 2555; 1900, pt. 4, pl. 265, fig. 902.

Blennius chuss Walbaum, Artedi Pisc., 1792, p. 186. "New York."

Phycis filamentosus Storer, Mem. Amer. acad., 1858, vol. 6, p. 367, pl. 29, fig. 4.

Me.— Common along whole coast. Eastport (Kendall coll. 1893; Casco Bay (Kendall coll. 1896; 1898; 1900; 1902).

Mass.— Massachusetts Bay (Storer 1859; B. S. N. H.); Provincetown (Atwood 1867); Boston (Goode 1879); Gloucester (Bean 1880); North Truro; Menemsha Bight (Kendall coll. 1896); Woods Hole (Baird 1873 and Smith 1898).

R. I.— Rhode Island (Rafinesque 1818); Point Judith (Mitchill 1818); Narragansett Bay (R. I. fish comm. 1899).

Conn.— Stonington (Linsley 1844); off Bridgeport; off Stratford Shoal Point; Middle Ground (Kendall coll. 1890); off Faulkners Island; off Branford Beacon; off Norwalk Light House (Kendall coll. 1892).

325. Gaidropsarus argentatus (Reinhardt).

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 3, p. 2559; 1900, pt. 4, pl. 367, fig. 906.

Motella argentata Reinhardt, Kong. Dansk. vid. selsk. Afh., 1838, vol. 7, p. 128. "Greenland."

Mass.— Nahant (Gill 1863); Beverly Beach; Wests Beach (Storer [Putnam] 1867); Vineyard Sound (Goode 1879).

TELEOSTOMI. ACANTHOPTERI.

GADIDAE.

326. ENCHELYOPUS CIMBRIUS (Linné).

Four bearded rockling.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 3, p. 2560; 1900, pt. 4, pl. 367, fig. 907.

Gadus cimbrius Linné, Syst. nat., ed. 12, 1766, vol. 1, p. 440. "IN O. ATLANTICO; SCANICO."

Motella caudacuta Storer. Storer, Mem. Amer. acad., 1858, vol. 6, p. 361, pl. 29, fig. 1.

ME.— Off Pemaquid (B. S. N. H., Arethusa coll.); Jonesport (Kendall coll. 1893).

MASS.— Provincetown (Storer 1848, 1859 and Bean 1880); Nahant Beach (B. S. N. H., Cooke coll.); Massachusetts Bay (Storer 1859); Gloucester (Bean 1880); Woods Hole (Smith 1898; Sherwood & Edwards 1901).

327. BROSMIUS BROSME (Müller).

Cusk.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 3, p. 2561.

Gadus brosme Müller, Zool. Danicae Prodr., 1776, p. 41. "DENMARK."

Brosmius flavescens LeSueur. Storer, Mem. Amer. acad., 1858, vol. 6, p. 368, pl. 29, fig. 2.

ME.— Rock bottoms along the whole coast. Off Wells Bay and Cape Porpoise (Atwood 1867); Eastport (Kendall coll. 1893); grounds off Matinicus and Monhegan islands, and off Cape Porpoise (Collins & Rathbun 1887); Casco Bay (Lee 1885; Kendall coll. 1893).

N. H.— (Linsley 1844).

MASS.— Middle Bank (Storer 1839 and 1859); Massachusetts

GADIDAE.

Bay (B. S. N. H., Storer coll.); near Cape Cod (Atwood 1867); Woods Hole (Smith 1898).

R. I.— Narragansett Bay (R. I. Fish Comm. 1899) off Newport (Tracy 1906).

MACROURIDAE.

328. MACROURUS BAIRDII Goode & Bean.

Rattail.

Goode & Bean, Amer. journ. sci., 1877, vol. 14, p. 471. "MASSACHUSETTS BAY." Oceanic ichth., 1896, p. 393, pl. 96, fig. 335. Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 3, p. 2583.

ME.— Eastport (Kendall coll. 1893).

MASS.— Massachusetts Bay (Goode & Bean 1877; 1879; 1896); Gloucester [?] (Bean 1880); Vineyard Sound (Goode & Bean 1896).

PLEURONECTIDAE.

329. HIPPOGLOSSUS HIPPOGLOSSUS (Linné).

Halibut.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 3, p. 2611; 1900, pt. 4, pl. 271, fig. 918.

Pleuronectes hippoglossus Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 269. "IN OCEANO EUROPAEO."

Hippoglossus vulgaris Cuv. Storer, Mem. Amer. acad., 1858, vol. 6, p. 370, pl. 30, fig. 1.

ME.— Formerly abundant, now scarce. Eastport (U. S. nat. mus. 1872); New Ledge (Storer 1859); off the coast (Kendall coll. 1895).

MASS.— Nantucket Shoals; Massachusetts Bay (Storer 1859); Woods Hole (Baird 1873); Halfway Rock, Salem Harbor; Glou-

cester Harbor (Goode & Bean 1879); Vineyard Sound (Smith 1898); Nantucket (Sharp & Fowler 1904).

R. I.— Block Island (Sherwood & Edwards 1901); off Watch Hill and off Block Island (Tracy 1906).

CONN.— Stonington (Linsley 1844).

330. HIPPOGLOSSOIDES PLATESSOIDES (Fabricius).

Sand-dab.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 3, p. 2614; 1900, pt. 4, pl. 372, fig. 919.

Pleuronectes platessoides Fabr., Fauna Groenlandica, 1780, p. 164. "GREENLAND."

Platessa dentata Storer. Storer, Mem. Amer. acad., 1863, vol. 8, p. 391, pl. 30, fig. 3.

MASS.— Provincetown (Storer 1863); Ipswich Bay, and off Cape Ann (B. S. N. H., Hyatt, Van Vleck & Gardiner coll. 1879); Massachusetts Bay (Goode & Bean 1879 and Bean 1880); Gloucester (Bean 1880); Woods Hole (Smith 1898).

R. I.— (Bean 1880 and Tracy 1906).

331. PARALICHTHYS DENTATUS (Linné).

Summer flounder; Flounder; Turbot; Plaice.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 3, p. 2629; 1900, pt. 4, pl. 372, fig. 922.

Pleuronectes dentatus Linné, Syst. nat., ed. 12, 1766, vol. 1, p. 458. "IN CAROLINA."

Platessa oblonga DeKay. Storer, Mem. Amer. acad., 1863, vol. 8, p. 395, pl. 31, fig. 2.

ME.— Casco Bay (U. S. nat. mus. 1872).

MASS.— Provincetown; Wellfleet (Storer 1863); Chatham

(B. S. N. H., Davidson coll.); North Truro; Monomoy; Menemsha Bight (Kendall coll. 1896); Waquoit (Lyman 1872); Woods Hole (Baird 1873; Bean 1880 and Smith 1898); Nantucket (Sharp & Fowler 1904).

R. I.— Narragansett Bay (R. I. fish comm. 1899).

CONN.— Stratford (Linsley 1844); Noank (Bean 1880); off Stratford Point; Middle Ground (Kendall coll. 1890).

332. PARALICHTHYS OBLONGUS (Mitchill).

Four-spotted flounder.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 3, p. 2632; 1900, pt. 4, pl. 374, fig. 924.

Pleuronectes oblongus Mitchill, Trans. lit. & philos. soc. N. Y., 1815, vol. 1, p. 391. "NEW YORK."

Platessa quadrocellata Storer. Storer, Mem. Amer. acad., 1863, vol. 8, p. 397, pl. 31, fig. 3.

MASS.— Provincetown (Storer 1847, 1863 and Bean 1880); Waquoit (Lyman 1872); South of Nantucket; Gayhead, (B. S. N. H., Hyatt & Simonds coll.); Mouth of Salem Harbor (Goode & Bean 1879); North Truro; Monomoy (Kendall coll. 1896); Woods Hole (Baird 1873; Bean 1880 and Smith 1898); Nantucket (Sharp & Fowler 1904).

R. I.— Narragansett Bay (R. I. fish comm. 1899).

CONN.— Stratford (Linsley 1844); Noank (Bean 1880); off Stratford; off Bridgeport; Middle Ground (Kendall coll. 1890); off Faulkners Island; off S. W. Ledge; off Branford Beacon (Kendall coll. 1892).

333. LIMANDA FERRUGINEA (Storer).

Rusty dab; Rusty flounder.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 3, p. 2644; 1900, pt. 4, pl. 377, fig. 929.

PLEURONECTIDAE.

Platessa ferruginea Storer, Rept., 1839, p. 141, pl. 2. "CAPE ANN." Mem. Amer. acad., 1863, vol. 8, p. 392, pl. 30, fig. 4.

ME.— Casco Bay (U. S. nat. mus. 1873).

MASS.— Cape Ann (Storer 1839 and 1863); Waquoit (Lyman 1872); Woods Hole (Baird 1873); Massachusetts Bay (Goode & Bean 1879); Salem; Gloucester (Bean 1880); North Truro; Monomoy (Kendall coll. 1896); Vineyard Sound; Buzzards Bay (Smith 1898).

R. I.— Narragansett Bay (R. I. fish comm. 1899).

334. PSEUDOPLEURONECTES AMERICANUS (Walbaum).

Winter flounder; Flounder; Roughback Flounder; Flatfish.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 3, p. 2647; 1900, pt. 4, pl. 379, fig. 933.

Pleuronectes americanus Walbaum, Artedi Pisc., 1792, p. 113. "NEW YORK."

Platessa plana Storer. Storer, Mem. Amer. acad., 1863, vol. 8, p. 389, pl. 30, fig. 2.

ME.— Common along the whole coast. Eastport (U. S. nat. mus. 1872; Kendall coll. 1893); Bucksport (U. S. nat. mus. 1878 and Bean 1880); Portland (Bean 1880); Casco Bay (Lee 1885; Kendall coll. 1892; 1893; 1896; 1900); Lower Penobscot River (Kendall coll. 1892); Penobscot River and Bay (Evermann 1903).

MASS.— Boston Harbor (Storer 1843); Deer Island (Storer 1839; 1863); Massachusetts Bay (B. S. N. H., Putnam coll.); Orleans (B. S. N. H., Davidson coll.); Waquoit (Lyman 1872); Gloucester (Bean 1880); North Truro; Monomoy (Kendall coll. 1896); Woods Hole (Baird 1873; Goode 1879; Bean 1880 and Smith 1898); Annisquam (B. S. N. H., Hyatt, Van Vleck & Gardiner coll.); New Bedford; Woods Hole; Provincetown; Boston (Jordan & Evermann 1898).

PLEURONECTIDAE.

R. I.— Narragansett Bay (R. I. fish comm. 1899); Conimicut (Pope coll.); Willow Beach and Greenwich Bay (Tracy 1906).

CONN.—"Common" (Linsley 1844); off Bridgeport; off Stratford; Middle Ground (Kendall coll. 1890); off Branford Beacon (Kendall coll. 1892).

335. LIOPSETTA PUTNAMI (Gill).

Smooth flounder; Smooth-back flounder.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 3, p. 2650; 1900, pt. 4, pl. 380, fig. 936.

Euchalarodus putnami Gill, Proc. acad. nat. sci. Phil., 1864, p. 216. "SALEM, MASS."

Platessa glabra Storer. Storer, Mem. Amer. acad., 1863, vol. 8, p. 393, pl. 31, fig. 1.

ME.— Casco Bay (U. S. nat. mus. 1873; Kendall coll. 1892, 1898–1900); Portland (Bean 1880); Bucksport (Bean 1878 and 1880); Belfast (Jordan & Evermann 1898); Penobscot River and Bay (Evermann 1903).

MASS.— Boston Harbor (Storer 1843c); Salem (Gill 1864); Beverly Bridge; Salem Harbor (Goode & Bean 1879); Boston (Jordan & Evermann 1878).

R. I.— Providence.

336. GLYPTOCEPHALUS CYNOGLOSSUS (Linné).

Pole flounder; Lemon sole.

Goode & Bean, Oceanic ichth., 1896, p. 430, pl. 102, fig. 356. Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 3, p. 2657.

Pleuronectes cynoglossus Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 269. "IN OCEANO BELGIUM ALLUENTE."

ME.— Eastport (Goode & Bean 1896).

MASS.— Off Salem (Goode & Bean 1879); Gloucester (Bean 1880); Massachusetts Bay (Bean 1880 and Goode & Bean 1896).

PLEURONECTIDAE.

337. Lophopsetta maculata (Mitchill).

Window pane; Plaice Sand-dab.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 3, p. 2660; 1900, pt. 4, pl. 382, fig. 938.

Pleuronectes maculatus Mitchill, Rept. fish. N. Y., 1814, p. 9. "New York." Storer, Mem. Amer. acad., 1863, vol. 8, p. 398, pl. 31, fig. 4.

Me.— Eastport (U. S. nat. mus. 1875 and Bean 1880); Bucksport (Goode 1884); Casco Bay (U. S. nat. mus. 1873; Bean 1880; Smith & Kendall 1896).

Mass.— Provincetown (Storer 1845 and Bean 1880); Holmes Hole (Storer 1863); Waquoit (Lyman 1872); Salem Harbor; Gloucester Harbor; Milk Island (Goode & Bean 1879); Vineyard Sound; Gloucester (Bean 1880); North Truro; Monomoy; Menemsha Bight (Kendall coll. 1896); Woods Hole (Baird 1873; Bean 1880 and Smith 1898); Nantucket (Sharp & Fowler 1904).

R. I.— Narragansett Bay (R. I. fish comm. 1899).

Conn.— Bridgeport; Stonington (Linsley 1844); Noank (Bean 1880); off Bridgeport; off Stratford; Middle Ground (Kendall coll. 1890); off Faulkners Island; off S. W. Ledge; off Branford Beacon (Kendall coll. 1892).

SOLEIDAE.

338. Achirus fasciatus Lacépède.

Hogchoker.

Lacépède, Hist. nat. poiss., 1802, vol. 4, p. 659. "Charleston, S. C." Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 3, p. 2700; 1900, pt. 4, pl. 387, fig. 948.

Achirus mollis Cuv. Storer, Mem. Amer. acad., 1863, vol. 8, p. 400, pl. 32, fig. 1, 6.

SOLEIDAE.

Mass.— Tashmore Pond, Holmes Hole (Storer 1839); Nahant (Storer 1842); Holmes Hole; Charles River (Storer 1863); Woods Hole (Baird 1873); Nahant, Provincetown (Goode & Bean 1879); New Bedford (Bean 1880); Menemsha Bight (Kendall coll. 1896); Wareham River; Vineyard Sound; Woods Hole (Smith 1898).

R. I.— Providence; Newport (Bean 1880); Narragansett Bay (R. I. fish comm. 1899); Conimicut (Pope coll. 1894–97).

Conn.— Stratford (Linsley 1844); near Hartford (Ayres 1844); off Stratford; Middle Ground (Kendall coll. 1890).

LOPHIIDAE.

339. Lophius piscatorius Linné.

Goosefish; Monkfish.

Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 236. "in Oceano Europaeo sub lapidum fornicibus." Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 3, p. 2713; 1900, pt. 4, pl. 388, fig. 952.

Lophius americanus Cuv. Storer, Mem. Amer. acad., 1855, vol. 5, p. 267, pl. 18, fig. 2.

Me.— Eastport (U. S. nat. mus. 1872; Kendall coll. 1893); Casco Bay (Lee 1885; Kendall coll. 1896; 1900).

Mass.— Massachusetts Bay (Storer 1839 and Cutting 1860); Boston Bay (Storer 1839); Provincetown (Storer 1855); Waquoit (Lyman 1872); Woods Hole (Baird 1873); Gloucester (Bean 1880); North Truro; Monomoy; Menemsha Bight (Kendall coll. 1896); Vineyard Sound (Smith 1898); Nantucket (Sharp & Fowler 1904).

R. I.— Narragansett Bay (R. I. fish comm. 1899).

Conn.— Bridgeport; Stratford (Linsley 1844).

TELEOSTOMI. ACANTHOPTERI.

ANTENNARIIDAE.

340. PTEROPHRYNE HISTRIO (Linné).

Mousefish.

Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 3, p. 2716.

Lophius histrio Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 237. "IN PELAGO INTER FUCUM NATANTEM."

Chironectes laevigatus Cuv. Storer, Mem. Amer. acad., 1855, vol. 5, p. 270, pl. 18, fig. 3.

MASS.— Holmes Hole (Storer 1839 and 1855); Woods Hole (Bean 1880 and Smith 1898).

R. I.— Montauk Point (?); mouth of Sakonnet River (Tracy 1906).

CONN.— Long Island Sound (Linsley 1844).

OGCOCEPHALIDAE.

341. DIBRANCHUS ATLANTICUS Peters.

Peters, Monats. kon. akad. wiss. Berlin, 1876, (1875), p. 736, pl. "WEST AFRICA 360 FATHOMS." Goode & Bean, Oceanic ichth., 1896, p. 501, pl. 122, fig. 413. Jordan & Evermann, Bull. 47, U. S. nat. mus., 1898, pt. 3, p. 2743.

R. I.— Off Block Island (Goode & Bean 1896); Newport [?] (Jordan & Evermann 1898).

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